

EXECUTIVE SUMMARY

Fansteel, Incorporated was added to CERCLIS (Comprehensive Environmental Response, Compensation and Liability Information System) in July of 1990 as a result of a request made by the Illinois Environmental Protection Agency.

The facility is situated on a nine-acre site located on the north side of 22nd Street between Commonwealth Avenue and Sheridan Road in the City of North Chicago, Lake County Illinois (the southwest 1/4 of the northwest 1/4 of Section 4, Township 44 North, Range 12 East). The site is currently bordered to the north by a residential area, to the east and south by industrial sites and to the west by a vacant lot.

According to the book, \$2500 AND A DREAM (the history of Fansteel, Inc.) the facility dates back to 1942 when the U.S. Government authorized and financed its construction. The construction of this facility was actually an expansion of the already-existing Fansteel facility, located south of 22nd Street. The new facility was to utilize upgraded and mechanized equipment for the production of tantalum (important in the production of munitions). At that time the facility was owned by the Tantalum Defense Corporation, a subsidiary of Fansteel.

Presently, it is not known how the site was utilized prior to 1942. However, available historical sources (Sanborn Maps and Lake County plat books) show no commercial or industrial development at the site prior to that year.

According to Jack Beyrer, Fansteel's Environmental Consultant, the north facility continued operations, producing tantalum mill products and forming non-ferrous metals, until November of 1990 when production at the facility ceased. Beyrer stated that the facility will remain as the company's corporate headquarters and therefore, several offices will continue to operate at the site.

According to Agency records the south facility (located south of 22nd Street) was owned by Fansteel, Inc. until December of 1986 when it was sold to Federal Chicago Corporation. This portion of the facility completed RCRA closure in the spring of 1987.

Agency records indicate that the Illinois Environmental Protection Agency has been involved with this facility since at least the early 1970's, as the facility applied for various operating permits and was subject to routine inspections. Included in the Agency Records is a 1972 Opinion of the Illinois Pollution Control Board stating that discharges from the Fansteel facility into nearby Pettibone Creek were having a detrimental effect on the stream. As a

result, the Board ordered Fansteel to pre-treat its effluent so that it could be discharged to the North Shore Sanitary District, thus restricting the discharge into Pettibone Creek.

According to Agency records, Fansteel, Inc. filed a RCRA Part-A Permit in November of 1980 and subsequently applied for the RCRA Part-B permit. While waiting for approval and making modifications to its Part-B application, Fansteel, Inc. operated under interim status. The facility continued to operate under interim status until January of 1991 when the RCRA Part-B application was withdrawn.

Currently, the facility is undergoing closure of its hazardous waste management unit - a waste oil storage area that at one time housed two 13,500 gallon tanks. According to Beyrer, the tanks were removed in the summer of 1990. Closure records indicate that various sampling events have revealed soil contamination in the tank area. Analytical results from the most recent sampling event (August, 1990) reveal contamination to a depth of 20 feet. The table below summarizes these findings.

SAMPLES COLLECTED AUGUST, 1990

<u>Compound</u>	<u>Concentration</u>
toluene.....	746 ppb
ethylbenzene.....	176 ppb
xylene.....	963 ppb
1,1,1-trichloroethane.....	872 ppb
trichloroethylene.....	68,417 ppb
tetrachloroethylene.....	10,376 ppb
chloroform.....	284 ppb
lead.....	2,970* ppb
cadmium.....	160* ppb

* Extraction Procedure Toxicity (EP Tox)
- The values given are the highest found
in this sampling event.

A site reconnaissance was conducted on January 17, 1991 by IEPA personnel. Those present were Judy Triller, Greg Dunn and Bob Casper of the IEPA's CERCLA Pre-Remedial Unit. Also present were Kevin Lesko and Mark Crites of the IEPA's RCRA program. Representatives of Fansteel were Jack Beyrer and Mark Steger, attorney for Fansteel. Because the facility is inactive, many areas were found to be vacant, while other areas contained only idle machinery. Several drums of waste, most said to be non-hazardous, were observed in the manufacturing building and warehouse.

The waste oil storage area that is undergoing closure was observed to be a metal building with a dirt floor. According to Beyrer, the west wall of the building has been removed to

allow access of equipment inside the building to collect samples. This building was found to be empty except for concrete saddles where a tank used to rest. The entire facility was found to be enclosed by a fence, and a guardhouse (occupied) was observed near the main gate, located along 22nd Street.

Based on information obtained from Agency files, site observations, and conversations with Jack Beyrer, two sources of possible contamination have been identified at the site.

- 1) Contaminated soil in the Waste Oil Storage Area. The area covers approximately 1440 square feet with contaminants identified to a depth of 20 feet (= 28800 cubic feet).
- 2) Drum storage area identified during the 1-17-91 site reconnaissance. Two drums of F001 waste (spent halogenated solvent) and nine other drums being analyzed to determine their classification as hazardous or non-hazardous. These drums were located in the manufacturing building stored on a concrete floor. (See site map.)

Drilling logs from sites to the east and west of the site indicate that fill extends from the ground surface to a depth of approximately 3 feet to 8.5 feet. An IEPA Emergency Response Unit incident log indicates that the "area was filled in years ago with what appears to be materials similar to fly ash, foundry sand". (The incident log deals with the

vacant lot just west of Fansteel, Inc.) Because no drilling logs from the Fansteel site are available at this time, it isn't clear whether this fill exists under the Fansteel facility.

Additional sources (well logs, drilling logs, an environmental report from a neighboring site) indicate that the geology of the area consists of glacial till to a depth of approximately 160 feet underlain by Silurian Dolomite to a depth of approximately 400 feet. Below the dolomite are the Ordovician-aged rocks of the Maquoketa Shale, Galena-Platteville Limestone and the Glenwood-St. Peter Sandstone. As indicated by well logs of the area and the IEPA Division of Public Water Supplies Facility Inventory, three aquifers are utilized in this region - the sand and gravel aquifer (of glacial till), the Silurian Dolomite, and the Glenwood-St. Peter Sandstone.

Information obtained from public water operators of the area indicates that the nearest known well is located approximately 1.5 miles south-southeast of the site. In the area between one and two miles of the site there are approximately 15 private wells and one public well serving a total of approximately 115 people. In the area between two and three miles of the site there are approximately 41 wells (four public wells, five non-community wells, and approximately 32 private wells) serving 5720 people, and between three and

four miles of the site there are approximately 170 wells (two non-community wells and approximately 168 private wells) serving 1820 people.

Others residing within four miles of the site obtain water from Lake Michigan. Within the 15-mile surface water route, there are eleven documented, public surface water intakes (all from Lake Michigan) serving approximately 235,000 people.

Surface water runoff from the site flows south to 22nd Street where it enters a stormwater outfall and discharges to Pettibone Creek. Pettibone Creek flows south and east through the Great Lakes Naval Training Center where it enters Lake Michigan approximately 1.2 miles from the site. (See attached map).

Information provided by the Illinois Department of Conservation documents the presence of 20 different state-endangered or threatened species as well as eight state-designated natural areas and two state-designated nature preserves within the 15-mile surface water route. All of these sensitive environments are located in or adjacent to Lake Michigan.

Information known about the site at this time suggests that the facility poses little or no threat to the air or nearby

surface water. The area of contaminated soil on site does present the possibility of groundwater contamination. However, this area is being addressed through the IEPA's RCRA program. Therefore, it is recommended that no further CERCLA remedial action be taken at this site.



**POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT**

POTENTIAL HAZARDOUS WASTE SITE PRELIMINARY ASSESSMENT PART 1 - SITE INFORMATION AND ASSESSMENT						I. IDENTIFICATION	
						01 STATE	02 SITE NUMBER
						IL	0005130 786
II. SITE NAME AND LOCATION							
01 SITE NAME (Legal name or descriptive name of site)			02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER				
FANSTEEL, INC.			22nd Street				
03 CITY	04 STATE		05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONDO DIST	
North Chicago	IL		600064	LAKE		097	
09 COORDINATES LATITUDE	LONGITUDE		Waukegan IL quadrangle				
42 19 12 -	087 50 40 -						
10 DIRECTIONS TO SITE (Starting from nearest public road)							
Located on north side of 22nd Street between Commonwealth Ave. and Sheridan Road.							
III. RESPONSIBLE PARTIES							
01 OWNER (if known)			02 STREET (Business, mailing, residence)				
FANSTEEL, INC.			1 Tantalum Place				
03 CITY	04 STATE		05 ZIP CODE	06 TELEPHONE NUMBER			
North Chicago	IL		1000104	(708) 689-4900			
07 OPERATOR (If known and different from owner)	08 STREET (Business, mailing, residence)						
Same As Above							
09 CITY	10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER				
			1				
13 TYPE OF OWNERSHIP (Check one)							
<input checked="" type="checkbox"/> A. PRIVATE	<input type="checkbox"/> B. FEDERAL:	(Agency name)			<input type="checkbox"/> C. STATE	<input type="checkbox"/> D. COUNTY	<input type="checkbox"/> E. MUNICIPAL
<input type="checkbox"/> F. OTHER:	(Specify)			<input type="checkbox"/> G. UNKNOWN			
14 OWNER/OPERATOR NOTIFICATION ON FILE (Check if any exists)							
<input checked="" type="checkbox"/> A. RCRA 3001 DATE RECEIVED: 11/18/80 MONTH DAY YEAR 3510		<input type="checkbox"/> B. UNCONTROLLED WASTE SITE (CERCLA 103) DATE RECEIVED: / /		/ C. NONE			
IV. CHARACTERIZATION OF POTENTIAL HAZARD							
01 ON SITE INSPECTION							
BY (Check one category)							
<input checked="" type="checkbox"/> YES	DATE 11/17/91 MONTH DAY YEAR	<input type="checkbox"/> A. EPA	<input type="checkbox"/> B. EPA CONTRACTOR	<input checked="" type="checkbox"/> C. STATE	<input type="checkbox"/> D. OTHER CONTRACTOR		
<input type="checkbox"/> NO		<input type="checkbox"/> E. LOCAL HEALTH OFFICIAL	<input type="checkbox"/> F. OTHER:	(Specify)			
CONTRACTOR NAME(S):							
02 SITE STATUS (Check one)		03 YEARS OF OPERATION					
<input type="checkbox"/> A. ACTIVE	<input checked="" type="checkbox"/> B. INACTIVE	<input type="checkbox"/> C. UNKNOWN	1942 BEGINNING YEAR	1990 ENDING YEAR	<input type="checkbox"/> UNKNOWN		
04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED							
Organics Oily Waste Heavy Metals							
05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION							
Groundwater (Environment / Population) Direct Contact (Population)							
V. PRIORITY ASSESSMENT							
01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)							
<input type="checkbox"/> A. HIGH Priority required priority	<input type="checkbox"/> B. MEDIUM Priority required	<input type="checkbox"/> C. LOW Priority not required	<input checked="" type="checkbox"/> D. NONE (No further action required, complete current disposition form)				
VI. INFORMATION AVAILABLE FROM							
01 CONTACT		02 OF / Agency/Organization				03 TELEPHONE NUMBER	
Jack Breyer		Fansteel, Inc.				(708) 689-4900	
04 PERSON RESPONSIBLE FOR ASSESSMENT		05 AGENCY	06 ORGANIZATION	07 TELEPHONE NUMBER	08 DATE		
Judy J. Triller		IEPA	DLPC/RPMS	(217) 782-6760	3/16/91	MONTH DAY YEAR	



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	DOOS130786

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)		02 WASTE QUANTITY AT SITE <small>(Measurements of waste occurring over the last 12 months)</small>	03 WASTE CHARACTERISTICS (Check all that apply)
<input checked="" type="checkbox"/> A SOLID <input type="checkbox"/> B POWDER/FINES <input type="checkbox"/> C SLUDGE <input type="checkbox"/> D OTHER	<input type="checkbox"/> E SLURRY <input checked="" type="checkbox"/> F LIQUID <input type="checkbox"/> G GAS <input type="checkbox"/> H UNKNOWN	TONS CUBIC YARDS UNKNOWN NO OF DRUMS	<input checked="" type="checkbox"/> A TOXIC <input checked="" type="checkbox"/> B CORROSIVE <input type="checkbox"/> C RADIOACTIVE <input type="checkbox"/> D PERSISTENT <input type="checkbox"/> E SOLUBLE <input type="checkbox"/> F INFECTIOUS <input checked="" type="checkbox"/> G FLAMMABLE <input type="checkbox"/> H IGNITABLE <input type="checkbox"/> I HIGHLY VOLATILE <input type="checkbox"/> J EXPLOSIVE <input type="checkbox"/> K REACTIVE <input type="checkbox"/> L INCOMPATIBLE <input type="checkbox"/> M NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OLY WASTE	25089	Gallons	Waste Oil / Solvent Mix
SOL	SOLVENTS	Unknown		[Detected in Soil samples]
PSD	PESTICIDES			[Also two 55-gallon drums]
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES	458	Gallons	
MES	HEAVY METALS	UNKNOWN		Detected in soil samples

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently used CAS numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
BAS	Sodium Hydroxide	1310-73-2	Solid - Unknown	Unknown	—
MES	Lead	7439-92-1	Found in Soil	2970	ppb
MES	Cadmium	7740-43-9	Found in Soil	160	ppb
SOL	Toluene	108-88-3	"	746	ppb
SOL	Ethyl benzene	100-41-4	"	176	ppb
SOL	Xylene	1330-20-7	"	916.3	ppb
SOL	1,1,1-trichloroethane	71-55-10	"	872	ppb
SOL	trichloroethylene	79-01-10	"	108417	ppb
SOL	Chloroform	67-11-7	"	284	ppb
SOL	Tetrachloroethylene	127-18-4	"	10376	ppb
	Caustic Rinse Water	—	Unknown	—	—
	Flammable Liquid	—	Unknown	Unknown	—
	Waste Oil / Solvent Mix	—	Unknown	Unknown	—

V. FEEDSTOCKS (See Appendix for CAS numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FCS			FDS		

VI. SOURCES OF INFORMATION (See Appendix for sources, e.g., State/Municipal Hazardous Waste Inventory)

- 1988 Generator Annual Hazardous Waste Report (IEPA-DLPC Files)
- Analytical Results of samples from Waste Oil Storage Area - Report by Carlson Knight Kudrna, Inc. (10-9-90)
- Site reconnaissance of 1-17-91 and interview with Jack Beyrer.

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT

PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

L IDENTIFICATION	
01 STATE	02 SITE NUMBER
IL	DOCS5130786

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 A GROUNDWATER CONTAMINATION03 POPULATION POTENTIALLY AFFECTED 10066502 OBSERVED DATE _____

04 NARRATIVE DESCRIPTION

 POTENTIAL

ALLEGED

Soil samples collected from the Waste Oil Storage Area reveal the presence of contaminants to a depth of 18' to 20'. Boring logs indicate groundwater at a depth of 10' to 11'.

01 B SURFACE WATER CONTAMINATION

03 POPULATION POTENTIALLY AFFECTED _____

02 OBSERVED DATE _____

04 NARRATIVE DESCRIPTION

 POTENTIAL

ALLEGED

Surface runoff from the site enters Pettibone Creek, which flows just west then south of the site + enters Lake Michigan. RCRA inspections since 1982 indicate that wastes are stored in secure containers indoors. Therefore the likelihood of surface water contamination has been unlikely. Also see "K".

01 C CONTAMINATION OF AIR

03 POPULATION POTENTIALLY AFFECTED _____

02 OBSERVED DATE _____

04 NARRATIVE DESCRIPTION

 POTENTIAL

ALLEGED

Older Agency Inspection Reports from IEPA / DAPC indicate some concern about certain possible air emissions. However, since the plant stopped production in Nov. of 1990, contamination of air is very unlikely.

01 D FIRE/EXPLOSIVE CONDITIONS

03 POPULATION POTENTIALLY AFFECTED _____

02 OBSERVED DATE _____

04 NARRATIVE DESCRIPTION

 POTENTIAL

ALLEGED

None documented or observed.

01 E DIRECT CONTACT

03 POPULATION POTENTIALLY AFFECTED _____

02 OBSERVED DATE _____

04 NARRATIVE DESCRIPTION

 POTENTIAL

ALLEGED

The presence of soil contamination leads to the possibility of a direct contact hazard. However, the entire facility is fenced + has a guard service, making direct contact very unlikely. The area of contamination is currently going through RCRA closure.

01 F CONTAMINATION OF SOIL03 AREA POTENTIALLY AFFECTED 2702 OBSERVED DATE 8-24-90

04 NARRATIVE DESCRIPTION

 POTENTIAL

ALLEGED

Contaminants have been detected in the soil of the Waste Oil Storage Area to a depth of 18 feet to 20 feet. This area is situated inside a metal building.

01 G DRINKING WATER CONTAMINATION03 POPULATION POTENTIALLY AFFECTED 758202 OBSERVED DATE _____

04 NARRATIVE DESCRIPTION

 POTENTIAL

ALLEGED

The nearest documented well is located approximately 1.5 miles south-southeast of the site. This and other wells in the same area draw water from a sand + gravel aquifer at a depth of approx. 140 feet.

01 H WORKER EXPOSURE/INJURY

03 WORKERS POTENTIALLY AFFECTED _____

02 OBSERVED DATE _____

04 NARRATIVE DESCRIPTION

 POTENTIAL

ALLEGED

None documented or observed.

01 I POPULATION EXPOSURE/INJURY

03 POPULATION POTENTIALLY AFFECTED _____

02 OBSERVED DATE _____

04 NARRATIVE DESCRIPTION

 POTENTIAL

ALLEGED

None documented or observed.

Facility is enclosed by a fence. An occupied guardhouse is located near the main gate.



POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE 02 SITE NUMBER
IL **D005130786**

II. HAZARDOUS CONDITIONS AND INCIDENTS (Check all applicable)

01 J. DAMAGE TO FLORA
04 NARRATIVE DESCRIPTION

02 OBSERVED (DATE: _____) POTENTIAL ALLEGED

None documented or observed.

01 K. DAMAGE TO FAUNA
04 NARRATIVE DESCRIPTION

02 OBSERVED (DATE: _____) POTENTIAL ALLEGED

Older Agency records (DWPC - 1972) indicate that the facility formerly discharge effluent to Pettibone Creek, having a detrimental effect on that stream. (As a result, Fansleel was ordered to pretreat its effluent, which would then be released to the North Shore Sanitary District.)

01 L CONTAMINATION OF FOOD CHAIN
04 NARRATIVE DESCRIPTION

02 OBSERVED (DATE: _____) POTENTIAL ALLEGED

See "K", above.

01 M UNSTABLE CONTAINMENT OF WASTES
(Such as leaking drums, leaking tanks, etc.)

02 OBSERVED (DATE: 8-24-90) POTENTIAL ALLEGED

03 POPULATION POTENTIALLY AFFECTED: _____

04 NARRATIVE DESCRIPTION

See "F".

01 N DAMAGE TO OFFSITE PROPERTY
04 NARRATIVE DESCRIPTION

02 OBSERVED (DATE: _____) POTENTIAL ALLEGED

None Known

01 O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs
04 NARRATIVE DESCRIPTION

02 OBSERVED (DATE: _____) POTENTIAL ALLEGED

None Known

01 P. ILLEGAL/UNAUTHORIZED DUMPING
04 NARRATIVE DESCRIPTION

02 OBSERVED (DATE: _____) POTENTIAL ALLEGED

None documented or observed.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

III. TOTAL POPULATION POTENTIALLY AFFECTED: 100,665

IV. COMMENTS

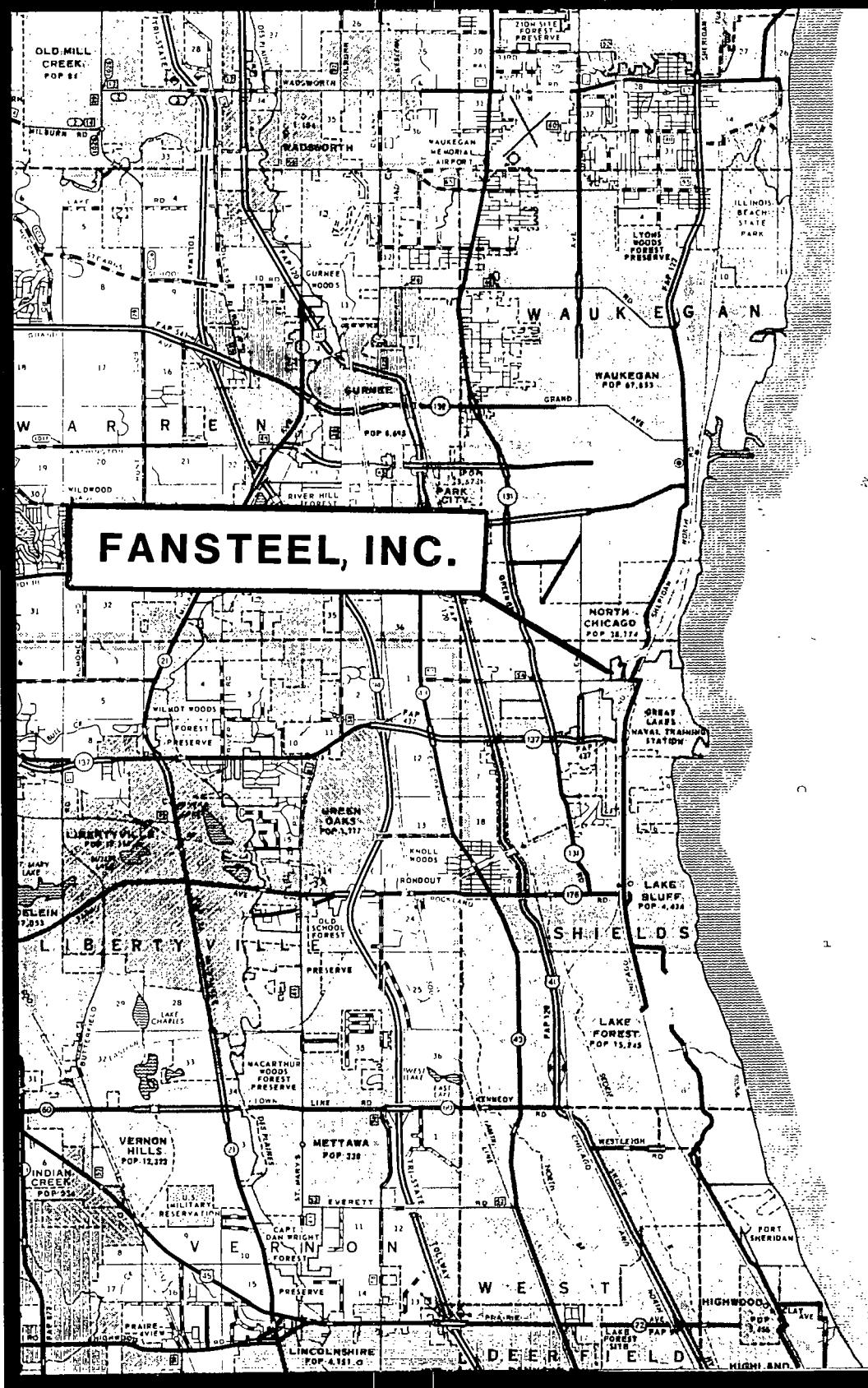
V. SOURCES OF INFORMATION (Check sources referenced, e.g., State Regs, Company Reports, Reports)

- Oct. 9, 1990 Report by Carlson Knight Kudrna, Inc. citing analytical results of samples collected from Waste Oil Storage Area
- Information from local water operators and well logs.
- Records on file at IEPA DLPC, DAPC, DWPC.

FANSTEEL, INC.



SITE LOCATION



FANSTEEL, INC.

Lake County



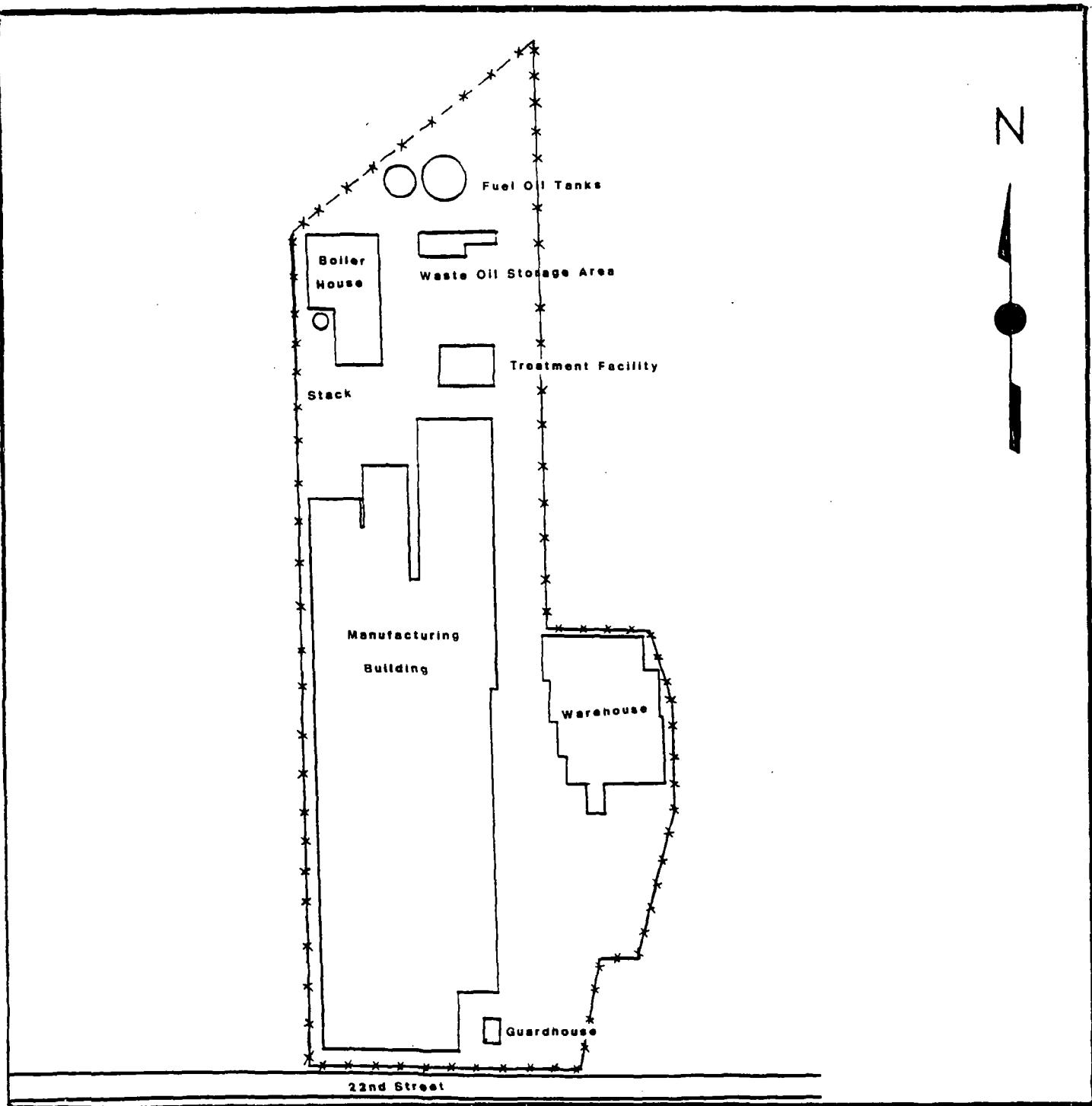
IEPA



Chicago Aerial Survey Inc. 1985 Air Photo

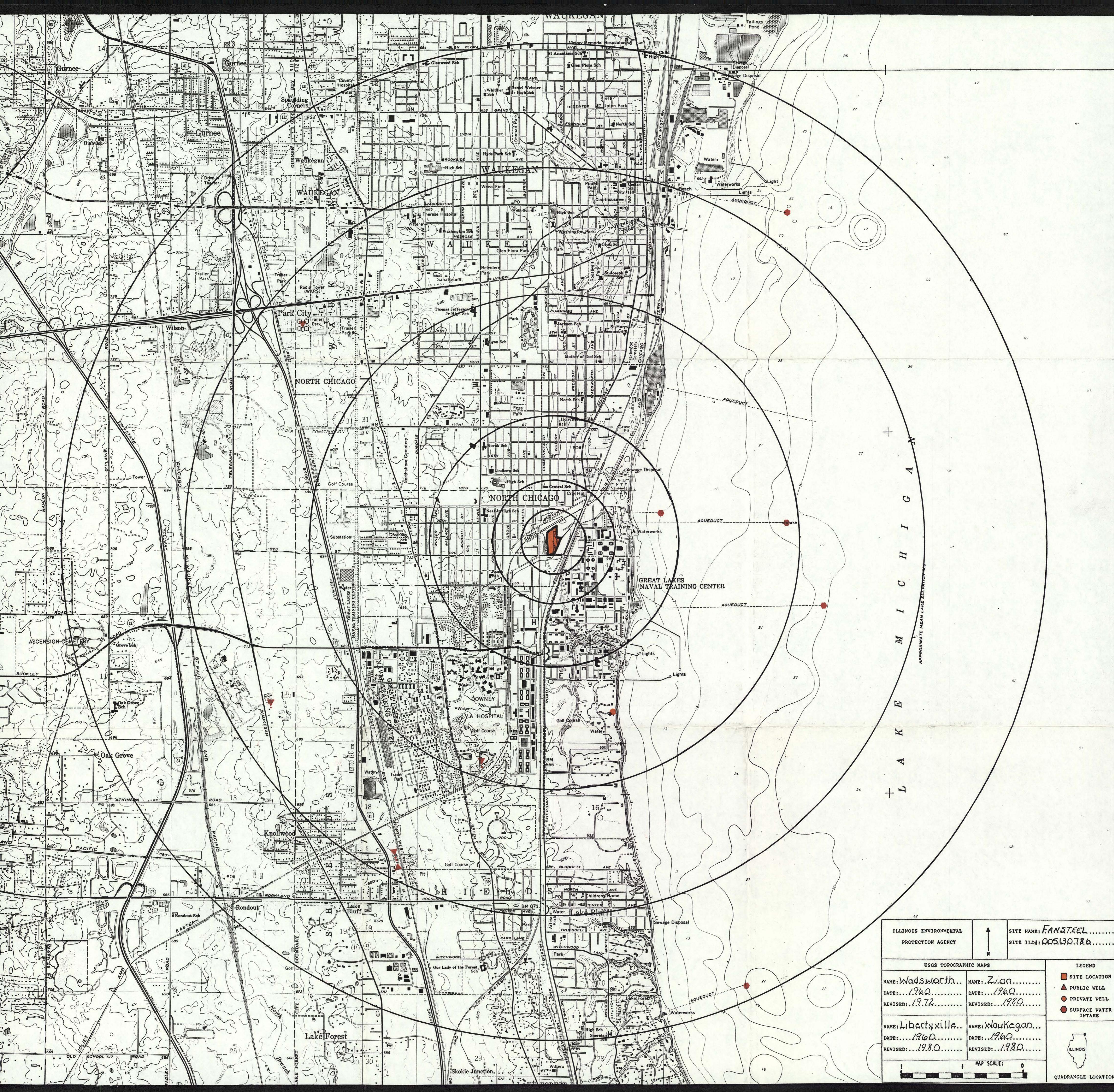
FANSTEEL INC.





FANSTEEL INC.

FOUR-MILE RADIUS MAP



15-MILE SURFACE WATER ROUTE MAP



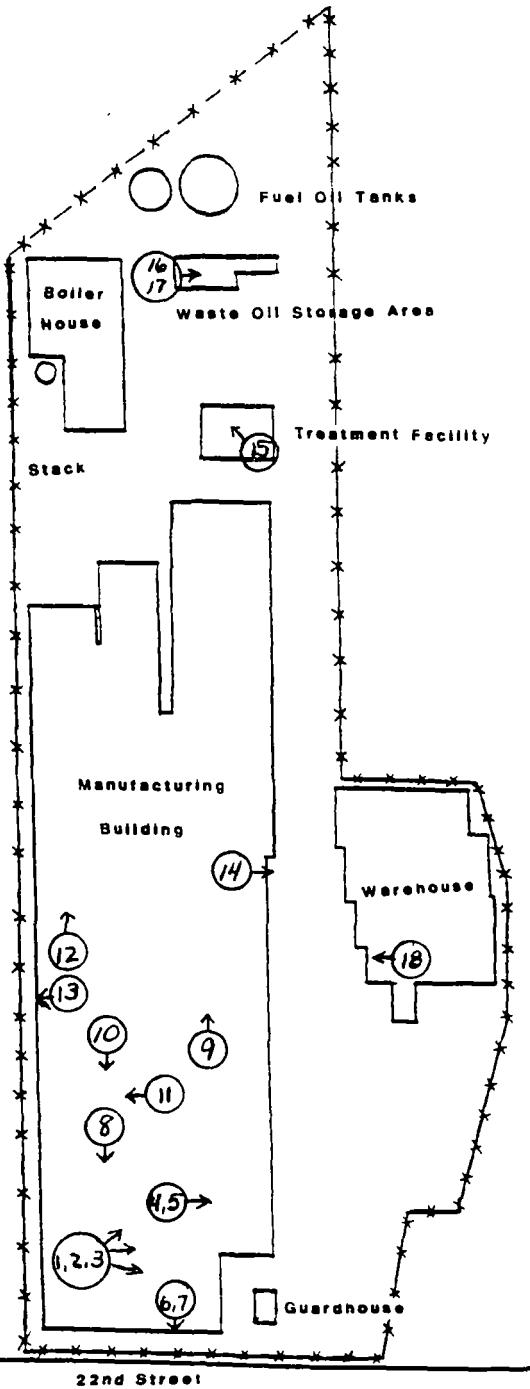


Photo Locations
FANSTEEL, INC.

DATE: 1-17-91

TIME: 10:10 A.M.

PHOTOGRAPH TAKEN BY:

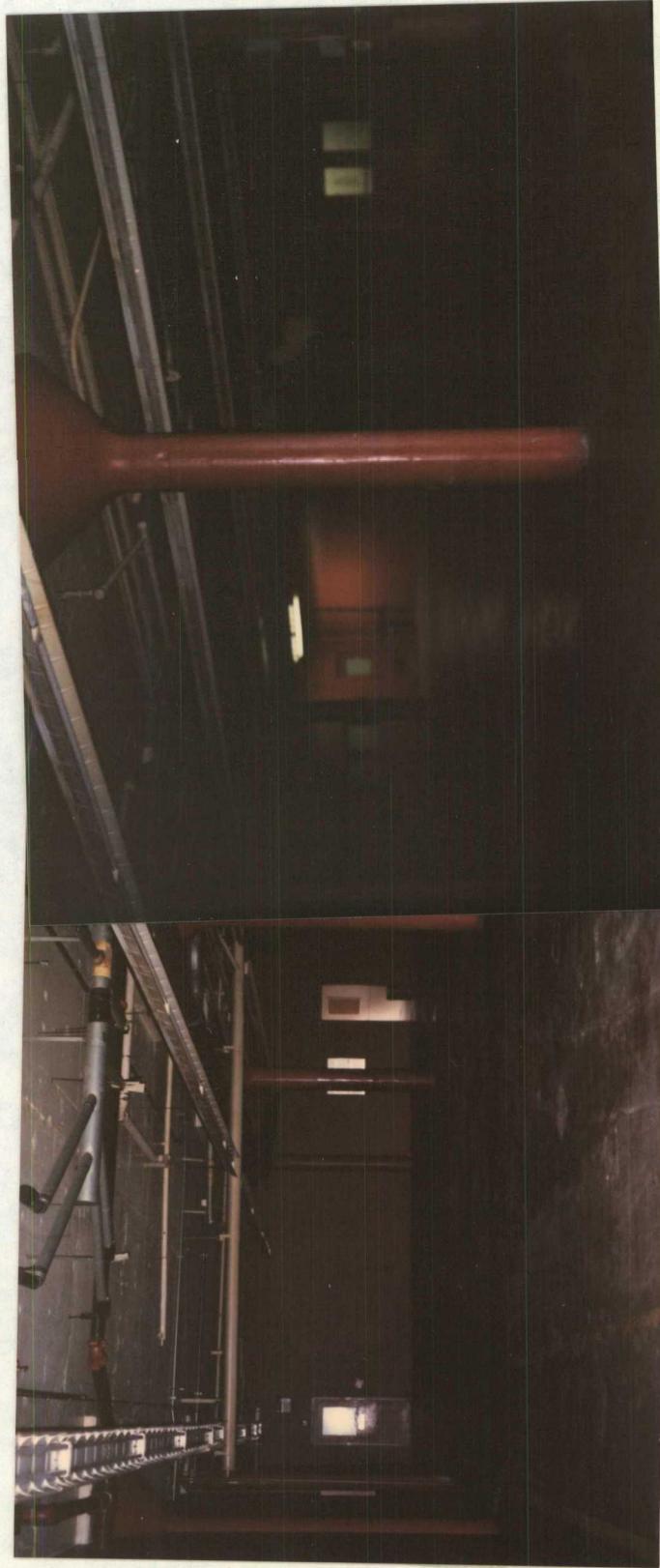
Bob Casper

PHOTO NUMBER: 1 + 2

LOCATION: _____

COMMENTS: PICTURE TAKEN TOWARD

the east. Vacant 2nd
floor area of Met. B
Building



DATE: _____

TIME: _____

PHOTOGRAPH TAKEN BY:

PHOTO NUMBER: _____

LOCATION: _____

COMMENTS: PICTURE TAKEN TOWARD

DATE: 1-17-91

TIME: 10:10 a.m.

PHOTOGRAPH TAKEN BY:

Bob Casper

PHOTO NUMBER: 3

LOCATION: _____

COMMENTS: PICTURE TAKEN TOWARD

the east. Vacant 2nd
floor area of Met. B
Building.



DATE: _____

TIME: _____

PHOTOGRAPH TAKEN BY:

PHOTO NUMBER: _____

LOCATION: _____

COMMENTS: PICTURE TAKEN TOWARD

DATE: 1-17-91

TIME: 10:50 a.m.

PHOTOGRAPH TAKEN BY:

Bob Casper

PHOTO NUMBER: 6

LOCATION: ILD 005130786

FANSTEEL

North Chicago facility

COMMENTS: PICTURE TAKEN TOWARD

the south. Tube drawing
dept. in Met. B
building.



DATE: 1-17-91

TIME: 10:50 a.m.

PHOTOGRAPH TAKEN BY:

Bob Casper

PHOTO NUMBER: 7

LOCATION: ILD 005130786

FANSTEEL

North Chicago facility

COMMENTS: PICTURE TAKEN TOWARD

the south. Tube drawing
dept. in Met. B
Building



DATE: 1-17-91

TIME: 10:20 a.m.

PHOTOGRAPH TAKEN BY:

Bob Casper

PHOTO NUMBER: 4 + 5

LOCATION: ILD 005130786

FANSTEEL

North Chicago Facility

COMMENTS: PICTURE TAKEN TOWARD

the east. Laboratory
area. Third floor of
Met. B Building.



DATE: _____

TIME: _____

PHOTOGRAPH TAKEN BY:

PHOTO NUMBER: _____

LOCATION: _____

COMMENTS: PICTURE TAKEN TOWARD

DATE: 1-17-91

TIME: 10:59 a.m.

PHOTOGRAPH TAKEN BY:

Bob Casper

PHOTO NUMBER: 8

LOCATION: ILD 005130786

FANSTEEL

North Chicago facility

COMMENTS: PICTURE TAKEN TOWARD

the south. Small

"Z mill" room in

Met. B building.



DATE: 1-17-91

TIME: 11:05 a.m.

PHOTOGRAPH TAKEN BY:

Bob Casper

PHOTO NUMBER: 9

LOCATION: ILD 005130786

FANSTEEL

North Chicago facility

COMMENTS: PICTURE TAKEN TOWARD

the north. Main area

First floor of Met.

B building.



DATE: 1-17-91

TIME: 11:07 a.m.

PHOTOGRAPH TAKEN BY:

Bob Casper

PHOTO NUMBER: 10

LOCATION: ILD 005130786

FANSTEEL

North Chicago facility

COMMENTS: PICTURE TAKEN TOWARD

the south. Drums
containing trichloroethylene
to be reclaimed. In
Met. B building.



DATE: 1-17-91

TIME: 11:10 am

PHOTOGRAPH TAKEN BY:

Bob Casper

PHOTO NUMBER: 11

LOCATION: ILD 005130786

FANSTEEL

North Chicago facility

COMMENTS: PICTURE TAKEN TOWARD

the west. Five drums,
3 containing trichloroethylene
to be reclaimed, 2 containing
hazardous waste (FOOI).

Located in Met. B building.



DATE: 1-17-91

TIME: 11:13 a.m.

PHOTOGRAPH TAKEN BY:

Bob Casper

PHOTO NUMBER: 12

LOCATION: ILD 0051307810

FANSTEEL

North Chicago facility

COMMENTS: PICTURE TAKEN TOWARD

the north. Cleaning

room located in

Met. B building.



DATE: 11-17-91

TIME: 11:14 a.m.

PHOTOGRAPH TAKEN BY:

Bob Casper

PHOTO NUMBER: 13

LOCATION: ILD 0051307810

FANSTEEL

North Chicago facility

COMMENTS: PICTURE TAKEN TOWARD

the west. Concrete

drain located in

cleaning room.



DATE: 1-17-91

TIME: 11:21 a.m.

PHOTOGRAPH TAKEN BY:

Bob Casper

PHOTO NUMBER: 14

LOCATION: ILD 005130786

FANSTEEL

North Chicago facility

COMMENTS: PICTURE TAKEN TOWARD

the east. Primary

drum storage area.

(Oily rinse water & waste oil awaiting

analytic results). In Met. B

building.



DATE: 1-17-91

TIME: 11:29 a.m.

PHOTOGRAPH TAKEN BY:

Bob Casper

PHOTO NUMBER: 15

LOCATION: ILD 005130786

FANSTEEL

North Chicago facility

COMMENTS: PICTURE TAKEN TOWARD

the northwest.

Water Treatment facility



DATE: 1-17-91

TIME: 11:30 a.m.

PHOTOGRAPH TAKEN BY:

Bob Casper

PHOTO NUMBER: 16

LOCATION: ILD 0051307810

FANSTEEL

North Chicago facility

COMMENTS: PICTURE TAKEN TOWARD

the east. Waste oil
storage building. Located
in NE corner of the
facility.



DATE: 1-17-91

TIME: 11:31 a.m.

PHOTOGRAPH TAKEN BY:

Bob Casper

PHOTO NUMBER: 17

LOCATION: ILD 0051307810

FANSTEEL

North Chicago facility

COMMENTS: PICTURE TAKEN TOWARD

the east. Waste oil
storage building. Located
in N.E. corner of
facility.



DATE: 1-17-91

TIME: 11:45 a.m.

PHOTOGRAPH TAKEN BY:

Bob Casper

PHOTO NUMBER: 18

LOCATION: ILD 0051307860

FANSTEEL

North Chicago facility

COMMENTS: PICTURE TAKEN TOWARD

the west. Interim
waste storage area.



DATE: _____

TIME: _____

PHOTOGRAPH TAKEN BY:

PHOTO NUMBER: _____

LOCATION: _____

COMMENTS: PICTURE TAKEN TOWARD

Supporting Documentation

REFERENCES

1. Letter from Fansteel, Inc. dated 2-6-87 reporting the sell of its south side facility.
2. Opinion of the Illinois Pollution Control Board dated 11-28-72.
3. Excerpt from report prepared by Carlson, Knight, Kudrna, Inc. and dated 9-9-90 containing analytical information concerning samples collected from Fansteel, Inc. August 24, 1990.
4. Boring/Well Log Data Sheet by Maecorp, Inc. Data taken from borings in "vacant lot" located just west of Fansteel, Inc.

Drilling logs by Fox Drilling Co. for Environmental Resources Management - North Central, Inc. Data taken from borings at the North Chicago Refiners and Smelters facility, located just east of Fansteel, Inc.

5. Incident Log of IEPA Emergency Response Unit dated 6-13-88.
6. Well logs from the area (provided by Illinois State Water Survey).
7. Telephone Conversation Records describing water usage, and flow of Pettibone Creek.
8. Letter from Abbott Laboratories dated 2-1-91 describing groundwater use at Abbott Park.
9. Information provided by Illinois Department of Conservation.

Fansteel
Metals

number one tantalum plate 1500 Chicago Avenue 60647 phone (312) 689-4900 fax 210-110 TACB.W

February 6, 1987

Illinois Environmental Protection Agency
Division of Water Pollution Control
2200 Churchill Road
Springfield, IL 62706

Attention: Compliance Assurance Section

Subject: NPDES Discharge Monitoring Report

Reference: NPDES Permit IL 0002411

Gentlemen:

Enclosed is our discharge monitoring report for the month of January, 1987.

We have sold the south side facility to Federal Chicago Corporation on December 29, 1986. The reporting of outfall will be from the North Side facility (#001) only starting with this report.

Please contact me if you have any questions.

Yours very truly,

FANSTEEL/METALS


P. F. ZIEGLER
General Manager

PFZ:mb

Enclosure

RECEIVED
Compliance Assurance Section

FEB 13 1987
Environmental Protection Agency
STATE OF ILLINOIS

ILLINOIS POLLUTION CONTROL BOARD

November 28, 1972

ENVIRONMENTAL PROTECTION AGENCY)

v.)

PCB 72-76)

FANSTEEL, INC. and the CITY OF NORTH CHICAGO)

OPINION OF THE BOARD (by Mr. Dumcille)

This opinion is in support of an order entered by the Board on October 31, 1972 accepting a Stipulation and Proposal submitted by Fansteel, Inc. (Fansteel) and the Agency on June 14, 1972 as modified by a letter received October 31, 1972.

Complaint was entered by the Agency against Fansteel and the City of North Chicago on March 1, 1972 charging Fansteel with causing water pollution [Sect. 12(a) of the Environmental Protection Act]; violations of Rule 1.03(a), (c), and (d) of SWB-14; and violations of Rule 1.01 of SWB-5 (cyanide discharge) and charging North Chicago with allowing the discharge of the Fansteel contaminants thus causing water pollution. On June 14, 1972 a public hearing was held in North Chicago at which the Stipulation was presented for public comment. There was no adverse comment and in due time the Stipulation was presented to the Board.

Fansteel has two plants in North Chicago employing 700 persons manufacturing electrical contacts using precious metals among other materials. The South Plant is some 65 years old and includes processes of nickel plating, acid cleaning and tumbling and burnishing. The North Plant dates from 1942 and contains processes of metal cleaning, tungsten cutting, wire and tube drawing, tungsten powder reduction and generates effluents from the boiler house and laboratories.

Effluents from these two plants were discharged to Pettibone Creek containing settleable solids, cyanide, metals, acid and caustic wastes. Biological surveys performed in 1968 and 1970 have indicated detrimental effects from the Fansteel discharges to Pettibone Creek. The turbid wastes from the north plant and the toxic wastes from the south plant affect the north

branch and main trunk of the stream to its mouth at the Great Lakes Naval Training Station Harbor. The reaches of the creek from the south plant outfall to and somewhat beyond Sheridan Road are best described as a biological desert. The creek does not fully recover before it terminates at the harbor. (EPA Statement of September 25, 1972, pp. 9-10).

The Stipulation provides and the Board has ordered that Fansteel will pretreat the South Plant effluent to permit discharge of all of its effluent to the North Shore Sanitary District as specified in Exhibit F of these proceedings within 22 weeks after an Agency permit is issued. Similarly, the Board has ordered that the North Plant pretreat its effluent in order that it may be discharged to NSSD to be done within 26 weeks after the Agency permit is issued.

In first discussing the Stipulation, the Board has two main concerns before approving it. The first concern dealt with the effects of the Fansteel effluent upon the North Chicago sewage treatment plant of the North Shore Sanitary District both as to possible upsets of the biological treatment and possible hydraulic overloading. On July 25, 1972 the Board entered an order requesting additional data from the Agency.

The Agency furnished on September 25, 1972 an extensive theoretical analysis showing that the biological treatment would not be harmed. It justified the additional hydraulic load on the plant in spite of the Board's prohibition of other new connections to it by the fact that this diversion of the Fansteel effluent out of Pettibone Creek would enable that body of water to recover and would eliminate the present health hazard of toxic wastes in the Creek.

The second concern of a majority of the Board had to do with the amount and nature of the stipulated penalty to be paid. The June 14, 1972 original stipulation provided that Fansteel would conduct certain research on the carbon adsorption treatment of cyanide at the South Plant even though not necessary to permit the effluent discharge to the North Shore Sanitary District's plant. Data on the research was deemed to be of value to the Agency (Para. C). If the expenditures for this research program did not exceed \$25,000 then the difference between the figures would be paid to the State of Illinois (Para. D). The majority of the Board felt that Agency research should not be financed through, in effect, a penalty due the State. And since it was anticipated that, in fact, the research expenditures would exceed \$25,000, therefore no specific penalty would accrue to the State even though damage to Pettibone Creek from water pollution had occurred.

The modified Stipulation of October 31, 1972 provides that Fansteel will pay a penalty of \$20,000 to the State and will in addition perform the carbon adsorption cyanide research. The Board finds the modification entirely satisfactory and commends Fansteel for its offer to advance the waste treatment art by its research.

The City of North Chicago has filed a Motion for Summary Judgment which, in effect, would hold that it is absolved from any responsibility so far as abating pollution emanating from its sewers, as a consequence of the North Shore Sanitary District's alleged preemption of this responsibility. We find that a substantial issue of fact exists as to the role of the North Shore Sanitary District in this respect, which, itself, would preclude the entry of a summary judgment. Secondly, even if this was not so, we do not find North Chicago's contentions persuasive. The ordinance cited by North Chicago does not purport to relieve municipalities of their responsibility. The motion for summary judgment is denied. The mere co-extensive functions of a sanitary district in no way in itself relieves the city from its responsibilities so far as abating pollution from its sewers. See EPA v. City of Champaign, #71-51C, 2PCB 411, September 16, 1971; EPA v. City of Urbana, #71-365, PCB , September 6, 1972. By this holding, we are not precluding the possibility of arrangements between cities and sanitary districts, whereby a sanitary district would assume all responsibility and obligation with respect to sewage generated within a particular municipality, when such arrangement causes the sanitary district to assume this responsibility. However, in the present case, adequate proof of such an arrangement has not been made. Nevertheless, because of the basic agreement arrived at between Fansteel and the EPA, we see no reason for the imposition of a penalty against the municipality and none will be imposed.

This opinion constitutes the findings of fact and conclusions of law of the Board.

I, Christian L. Moffett, Clerk of the Illinois Pollution Control Board, hereby certify the above Opinion was adopted on the 25th day of November, 1972 by a vote of 5-0.

Christian L. Moffett
Christian L. Moffett, Clerk
Illinois Pollution Control Board

PN 8175



**Carlson
Knight
Kudrna, Inc.**

Management
Consultants for
Environmental
Issues

October 9, 1990

Mr. Mark Steger
McBride Baker & Coles
Northwestern Atrium Center
500 West Madison Street
40th Floor
Chicago, IL 60606

Subject: Analytical Results

Fansteel
RCRA Closure- Waste Oil Storage Area
North Chicago, Illinois

Dear Mr. Steger:

Pursuant to your request please find the analytical results and diagrams for the Phase Two Subsurface Soil Investigation at the above-referenced site.

Soil sampling was conducted at the site on August 24, 1990, under the supervision of Edward Garske and Frank Sherman of CKK. Drill rig and crew were provided by Patrick Drilling of Glen Elyn, Illinois. Four boreholes were drilled at the site in the locations shown in Figure One. The boreholes were drilled using a hollow stem auger to a depth of 20 feet. As each borehole was drilled, auger cuttings were continuously screened with a Century 128 Organic Vapor Analyzer (OVA) to identify locations with elevated levels of volatile organic compounds. Samples were collected using Shelby tube samplers from each borehole at depths of 3-5 feet, 9-11 feet, 13-15 feet, and 18-20 feet. The auger was steam cleaned between each borehole.

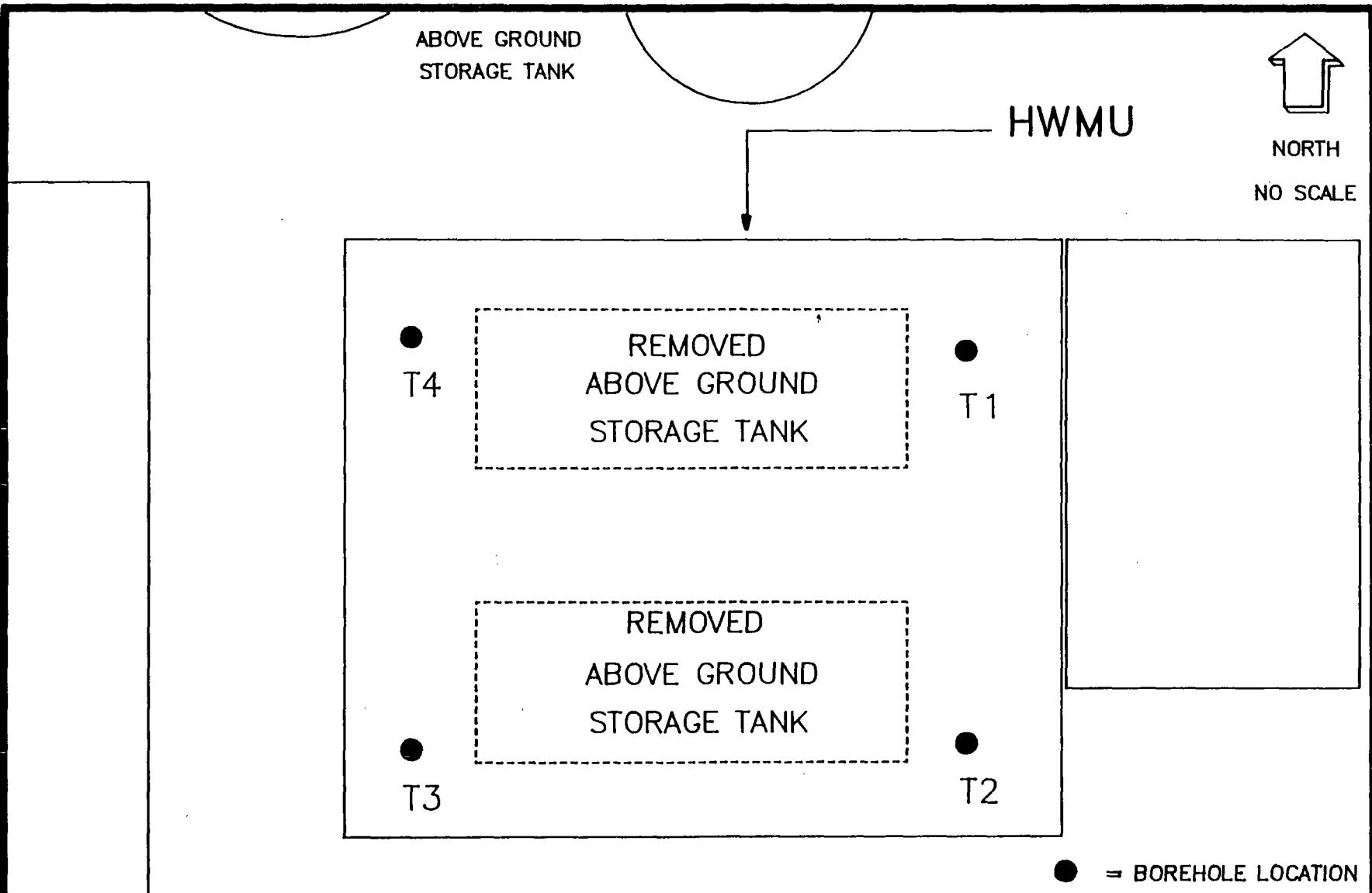
All samples were analyzed by Suburban Laboratories in Hillside, Illinois, for EP TOX lead and cadmium and the following volatile organic compounds; benzene, toluene, ethylbenzene, xylene, chlorobenzene, trichloroethylene, tetrachloroethylene, 1,1,1-trichloroethane, acetone, carbon tetrachloride, methylene chloride, and chloroform. The results of this analysis are summarized in Table One along with the current cleanup objectives for this site suggested by the Illinois Environmental Protection Agency (IEPA). A complete set of laboratory results and chain of custody records is attached.

In addition to Table One showing the analytical results, Figures Two through Six show the estimated boundaries of each type of contamination identified at the site.

RECEIVED

OCT 17 1990

IEPA-DLPC



CARLSON
KNIGHT
KUDRNA, Inc.

549 West Randolph Street
Chicago, Illinois 60606
(312) 346-2140

FIGURE ONE
FANSTEEL

TABLE ONE
FANSTEEL
ANALYTICAL RESULTS

	T1A	T1B	T1C	T1D	T2A	T2B	T2C	T2D	T3A	T3B	T3C	T3D	T4A	T4B	T4C	T4D	CLEANUP OBJECTIVE**
DEPTH (feet)	4	9	14	19	4	9	14	19	4	9	14	19	4	9	14	19	
pH	6.0	6.0	6.0	7.0	6.0	6.0	6.0	7.0	6.0	6.0	6.0	7.0	5.0	6.0	6.0	6.5	
Benzene																	5.0
Toluene																	2,000
Ethylbenzene																	680
Xylene																	440
1,1,1-Trichloroethane																	200
Methylene Chloride																	0.19
Carbon Tetrachloride																	5.0
Trichloroethylene	724	1,600	422		68,417	18,656		814	14,123	24,676	503						5.0
Tetrachloroethylene	9.8	5.4			10,376	1,168	3.6	10.4		1,706			3.6	253			0.80
Chlorobenzene																	60
Acetone																	16,600
Chloroform	14.1	14.0	16.1	13.5		✓284	25.5	15.2	25.1				27.1	13.4			0.19
Lead*						✓2,970	68										50
Cadmium*						✓160											10

All values reported in parts per billion (ppb)

Only those results above laboratory detection limits are reported in this table.

* Extraction Procedure Toxicity (EP TOX)

** Cleanup objectives as specified in IEPA letter to Fansteel dated February 13, 1990.

Mr. Mark Steger
McBride Baker & Coles
October 9, 1990
Page 2



If you have any questions or require any additional information
please feel free to contact me.

**Carlson
Knight
Kudrna, Inc.**

Respectfully submitted,
CARLSON KNIGHT KUDRNA, Inc.

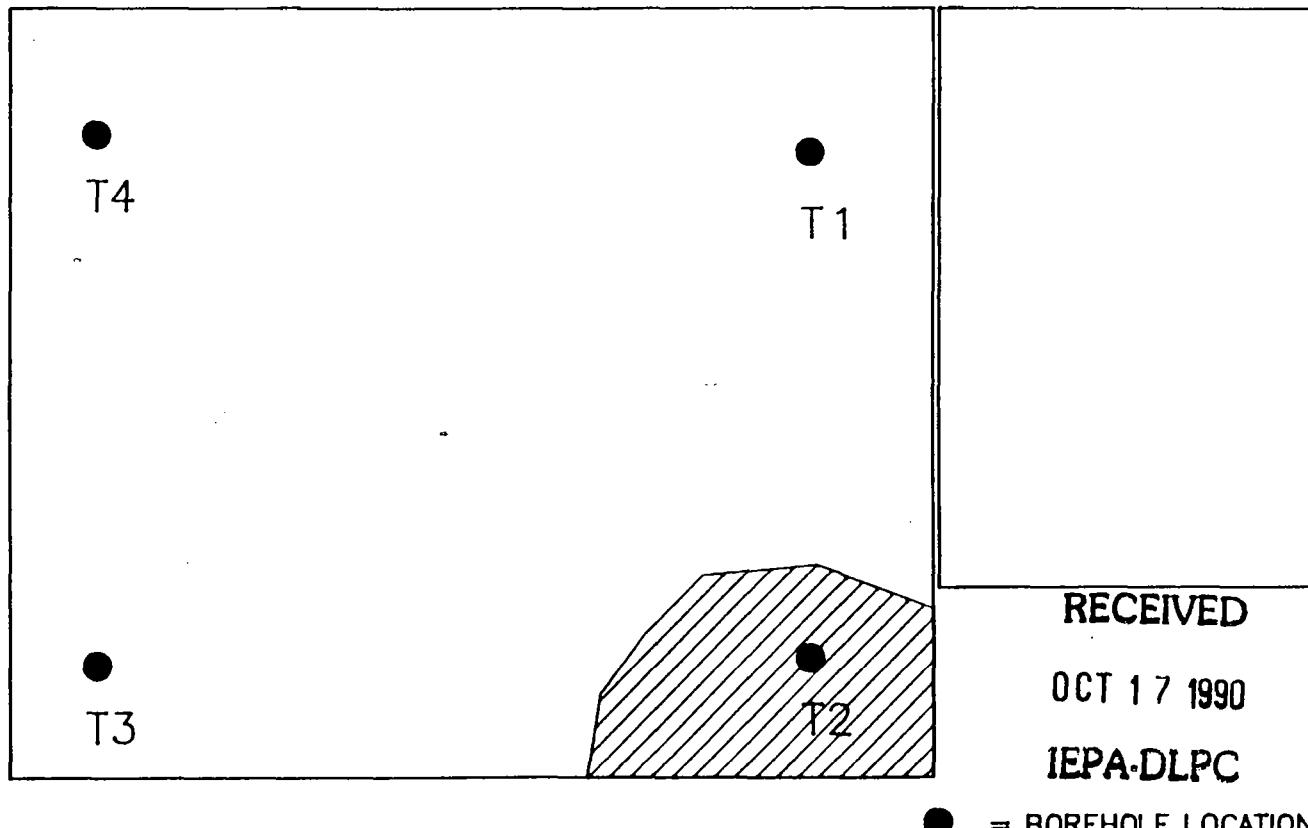
Edward Garske
Manager, Environmental
Monitoring Services



NORTH

NO SCALE

= 0-10 FEET DEEP



CARLSON
KNIGHT
KUDRNA, Inc.

549 West Randolph Street
Chicago, Illinois 60606
(312) 346-2140

FIGURE TWO
METAL CONTAMINATION

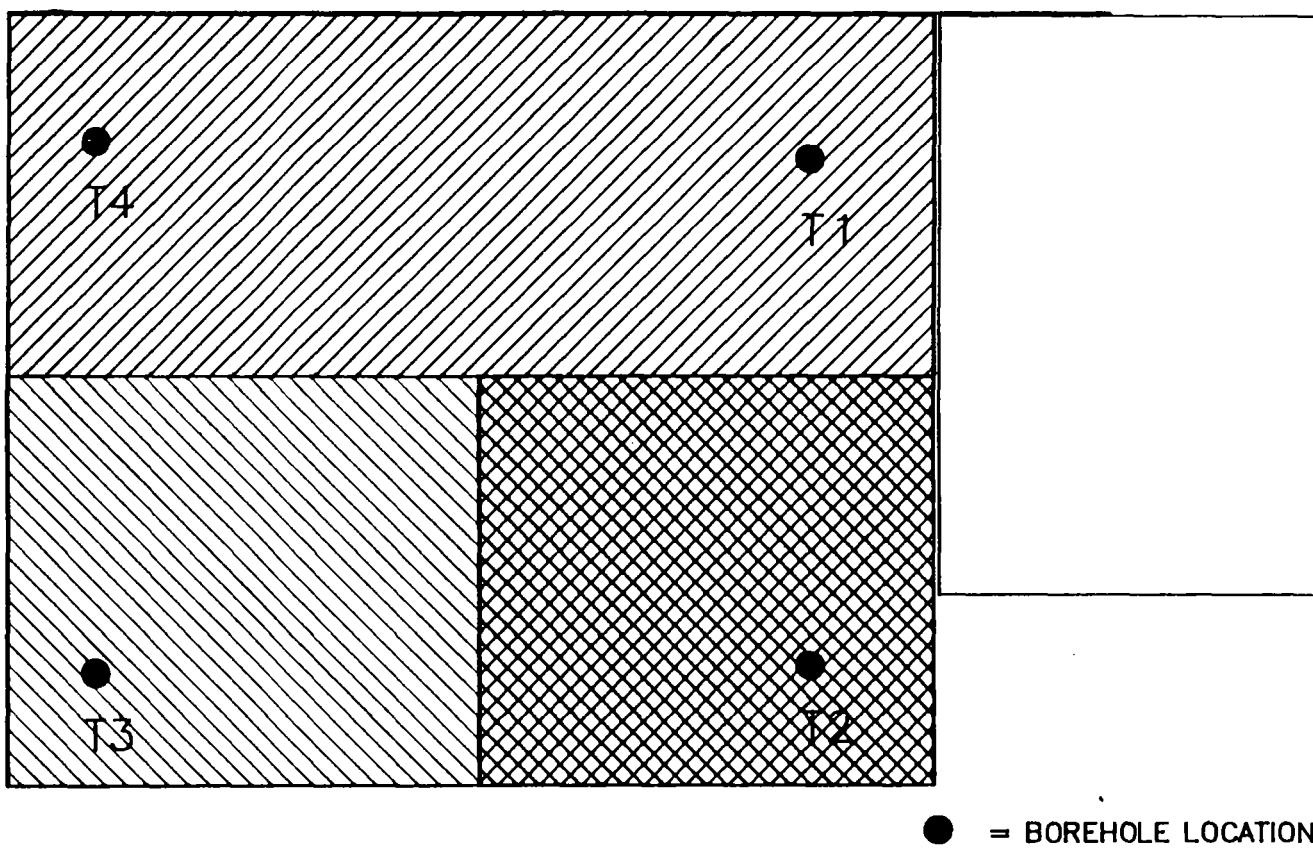
CONTAMINATION LEVEL

-  SLIGHT
-  MEDIUM
-  HEAVY



NORTH

NO SCALE



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KUDRNA, Inc.

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Chicago, Illinois 60606
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FIGURE THREE
VOLATILE CONTAMINATION
0-5 FEET

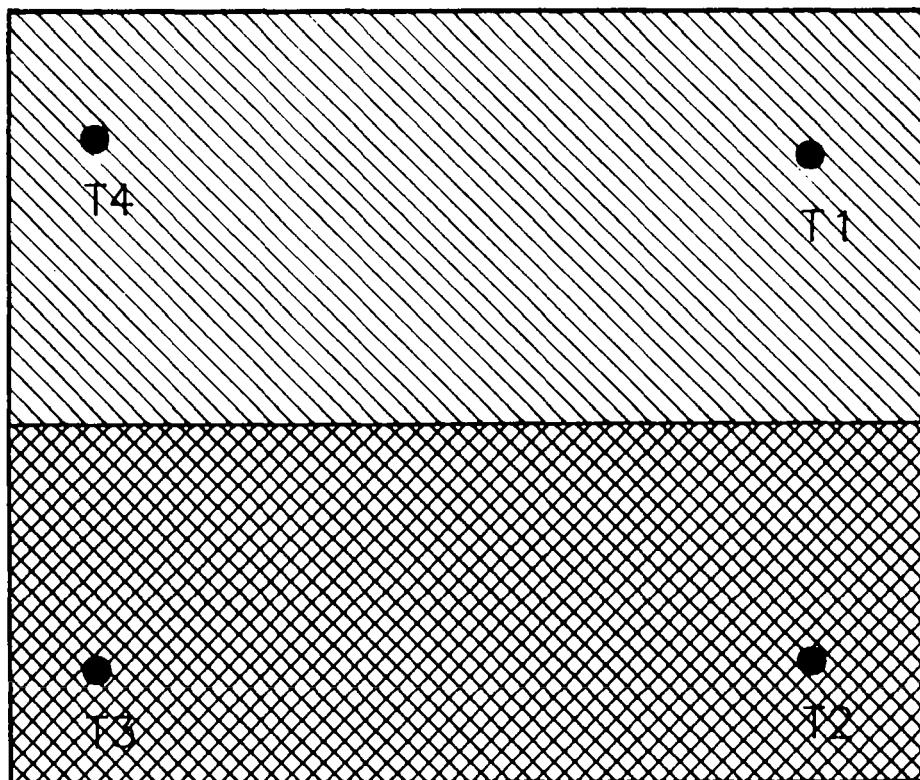
CONTAMINATION LEVEL

-  SLIGHT
-  MEDIUM
-  HEAVY



NORTH

NO SCALE



● = BOREHOLE LOCATION



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FIGURE FOUR
VOLATILE CONTAMINATION
5-10 FEET

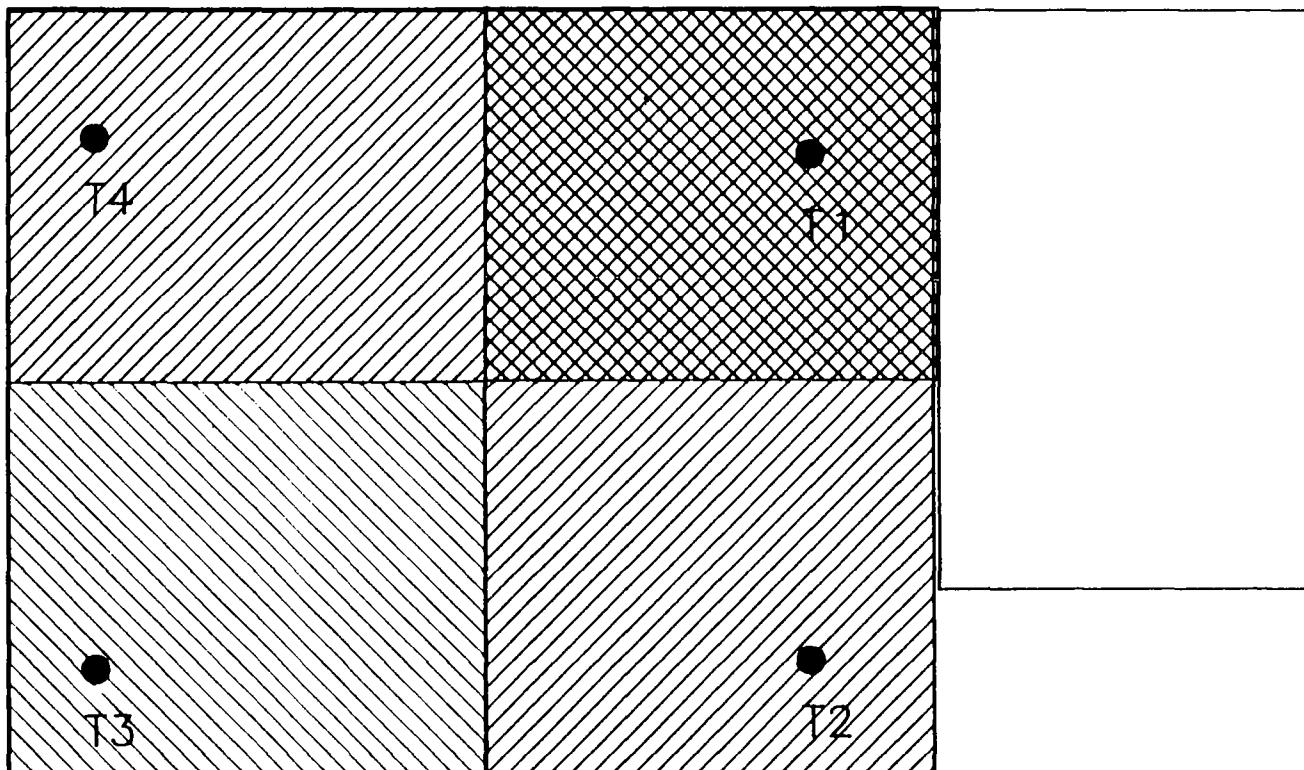
CONTAMINATION LEVEL

-  SLIGHT
-  MEDIUM
-  HEAVY



NORTH

NO SCALE



● = BOREHOLE LOCATION



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FIGURE FIVE
VOLATILE CONTAMINATION
10-15 FEET

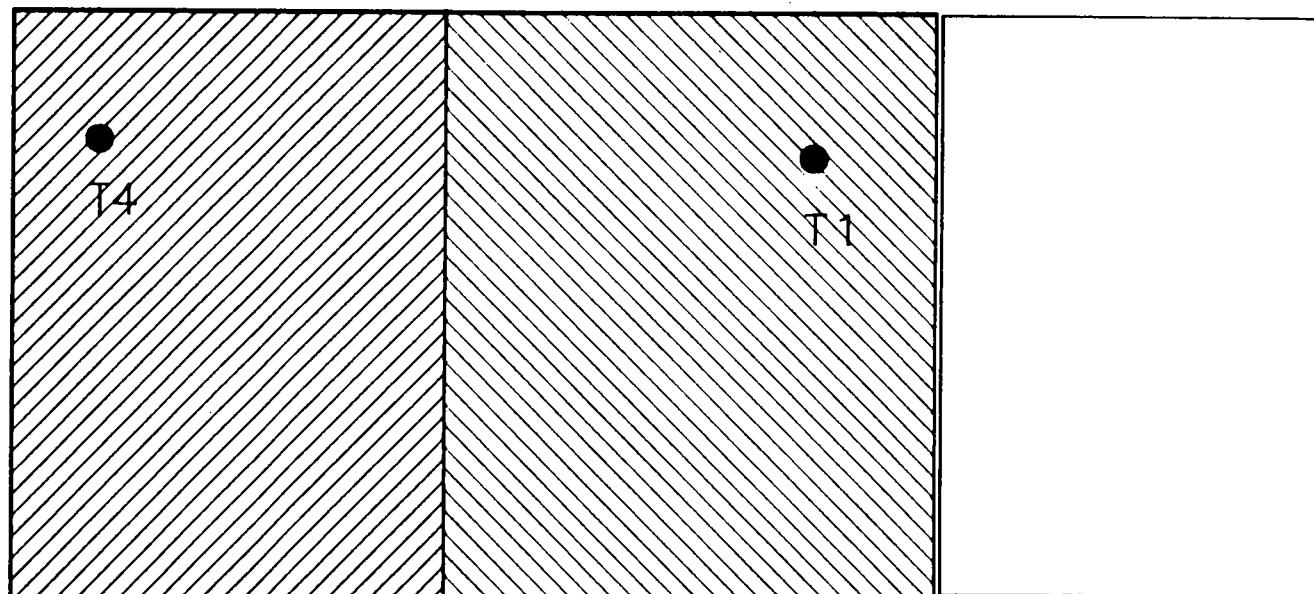
CONTAMINATION LEVEL

-  SLIGHT
-  MEDIUM
-  HEAVY



NORTH

NO SCALE



● = BOREHOLE LOCATION



CARLSON
KNIGHT
KUDRNA, Inc.

549 West Randolph Street
Chicago, Illinois 60606
(312) 346-2140

FIGURE SIX
VOLATILE CONTAMINATION
15-20 FEET

**BORING/WELL LOG DATA
MAECORP INCORPORATED**

Reference 4

PROJECT: Northern Trust Bank	WELL/BORING NO.: Boring 4
LOCATION: 22nd Street Stack Property	DATE DRILLED: January 6, 1989
DRILLING METHOD: Auger	CASING TYPE/dia: PVC - 2"
TOTAL LENGTH DRILLED: 10.5'	TOTAL CASING: 7'11"
GROUND ELEVATION: N/A	T.O.C. ELEVATION: N/A
GROUT TYPE/QUANTITY: Enviroplug	SCREEN TYPE/LENGTH: 7'11" - 12'11"
GROUT INTERVAL(S): 2'7" - 7'0"	SCREENED INTERVAL: 7'11" - 12'11"
DEPTH TO WATER: @ 10.7'	GRAVELPACK TYPE: Sand
WATER LEVEL ELEVATION: N/A	GRAVEL PACK INTERVAL: 7'0" - 12'11"
	STATIC WATER LEVEL: 1'7" DATE: 1/6/89

REMARKS: * Burnt rubber odor

**BORING/WELL LOG DATA
MAECORP INCORPORATED**

PROJECT: Northern Trust Bank	WELL/BORING NO.: Boring 3
LOCATION: 22nd Street Stack Property	DATE DRILLED: January 5, 1989
DRILLING METHOD: Auger	CASING TYPE/DIA: PVC - 2"
TOTAL DEPTH DRILLED: 10.5'	TOTAL CASING: 7'11"
GROUND ELEVATION: N/A	T.O.G. ELEVATION: N/A
GROUT TYPE/QUANTITY: Enviroplug	SCREEN TYPE/LENGTH: PVC - 5 feet
GROUT INTERVAL(S): 2'7" - 6'10"	SCREENED INTERVAL: 7'11" - 12'11"
DEPTH TO WATER: @ 10.7'	GRAVEL PACK TYPE: sand
WATER LEVEL ELEVATION: N/A	GRAVEL PACK INTERVAL: 6'10" - 12'11"
	STATIC WATER LEVEL: 3'2" DATE: 1/5/89

REMARKS:

LOGGED BY: Diane C. Kanode

SIGNATURE: Diane C. Kanode

**BORING/WELL LOG DATA
MAECORP INCORPORATED**

PROJECT: Northern Trust Bank	WELL/BORING NO.: Boring 2
LOCATION: 22nd Street Stack Property	DATE DRILLED: January 5, 1989
DRILLING METHOD: Auger	CASING TYPE/DIA: PVC - 2"
TOTAL DEPTH DRILLED: 10.5 '	TOTAL CASING: 7'11"
GROUND ELEVATION: N/A	T.O.C. ELEVATION: N/A
GROUT TYPE/QUANTITY: Enviroplug & cement	SCREEN TYPE/LENGTH: PVC - 5 feet
GROUT INTERVAL(S): 2'7" - 5'5"	SCREENED INTERVAL: 7'11" - 12'11"
DEPTH TO WATER: @ 10.7'	GRAVEL PACK TYPE: sand
WATER LEVEL ELEVATION: N/A	GRAVEL PACK INTERVAL: 6'7" - 12'11"
	STATIC WATER LEVEL: 2'7"
	DATE: 1/5/89

REMARKS:

Environmental Resources Management - North Central, Inc.

**DESCRIPTION OF CURRENT SITUATION REPORT
NORTH CHICAGO REFINERS AND SMELTERS
NORTH CHICAGO, ILLINOIS**



ERM-NORTH CENTRAL, INC.

DRILLING LOG

Project	NCRS	Owner	NCRS
Location	North Chicago, Illinois	W.O. Number	6159KWNCRS
Borehole Number	9-3	Total Depth	10'
		Diameter	7.0"
Drilling Company	Fox Drilling Company	Drilling Method	Hollow Stem Auger
Sampling Method	Split Spoon	Log By	P. Kodyciowski
		Date Drilled	3/22/89

ERM-NORTH CENTRAL, INC.

DRILLING LOG

Project ACRS

Owner MCRS

Location North Chicago, Illinois

W.O. Number 3159 KWNCRS

Boorehole Number 8-3A

Total Depth

Diameter 7.2"

Drilling Company Fox Drilling Company

Drilling Method Hollow Stem Auger

Sampling Method Split Spoon

Log By P. Koprowski Date Drilled 3/23/99

City N. Chicago
County Lake

PRP Eugene St
Ground Fire.

ER-1151

8 8 0 7 5 4

INCIDENT TYPE

- Actual Potential
- On Site Off Site Transportation
- Air Storm Sewer
- Surface Water Sanitary Sewer
- PWS Inside Building
- Soil/Ground Water Impervious Surface

- Abandoned Material HWF CSA LUST
- Open Burning Permit Oil Production
- Complaint Generated Agricultural
- PCB

Contractor For HWF _____

DISPOSAL

- Verified
- Incomplete
- Not Necessary

PERMITS (#s)

1. _____ 4. _____
2. _____ 5. _____
3. _____ 6. _____

LETTERS

Type	Sent	Response Required	Response Received
1.	/ /	/ /	/ /
2.	/ /	/ /	/ /
3.	/ /	/ /	/ /
4.	/ /	/ /	/ /

ENFORCEMENT

- Enf Referral Notice Sent / / /
 Enf Referral Date / / /
 EDG Action / / /
 Drop Case
 Proceed with enf
Atty. _____
 DCI Referral / / /

Name	IEPA NOTIFICATIONS	Date
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

OUTSIDE NOTIFICATIONS

Agency	Name	Date
[] IESDA	_____	/ /
[] IDPH	_____	/ /
[] ISP	_____	/ /
[] USEPA	_____	/ /
[] SFM,	_____	/ /
[] M&M	_____	/ /
[] DCI	_____	/ /
[] NRC	_____	/ /
[] IDOC	_____	/ /
[] IDOT	_____	/ /
[] IDNS	_____	/ /
[] USCG	_____	/ /
[] IDOL	_____	/ /
[] IDOA	_____	/ /
[] _____	_____	/ /
[] _____	_____	/ /

EVIDENCE SAMPLES

Sample Type (pte or post)	Taken By (Name)	Collected (Date)	To Lab (Date)	Results (Date)
1. _____	_____	_____	_____	_____
2. _____	_____	_____	_____	_____
3. _____	_____	_____	_____	_____
4. _____	_____	_____	_____	_____

- [] Photos
[] Videotape # _____

Name	RESPONSE	Telephone	On Scene
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

EVALUATION

1. HMAB
[] FOB [] D.O.
[] ERU 6/17/88

2. CSA
Reviewed by _____ Date / / /
IDES No. _____ Covered Facility _____
IDES SIC _____ IMD SIC _____
Chem sub-ISCA _____
Significant _____ Determined / / / By _____
NOS to RP / / /

- Release Report: Due / / / Rec'd / / /
IESDA to ESDA Due / / /
Review by Mngr Env. Prgrm _____
IEPA to ESDA Sent / / /

- ESDA to RP Due / / / Sent / / /
3. Recovery/Loss
Recovered Spillage % _____

- Unrecovered Loss To
[] Soil/GW [] Sanitary Sew
[] Surface Water [] Storm Sewer
[] Air
[] Environmentally sensitive area

CLOSE

- Closing Date / / / by _____
[] No action
[] Clean closure
[] Unrecoverable
[] Referral to _____

Reference 5



Illinois
Environmental
Protection Agency

8	8	0	7	5	4
---	---	---	---	---	---

IESDA INCIDENT ID

Caller: Kirk Humphreys-Haz Mat Ctr

2. Call back phone: 312 374-7755
3. represents: North Chicago Fire Dept.
caller notified: 25 6/12/88
caller arrived: 6/12/88
4. Type of Incident: Fire Leak
 Explosion Water Involvement
 Gas or Vapor cloud Other
 Evacuation (# of) _____

5. Incident Location
street 1000 22nd
city N Chicago In Near
county Lake 60064
milepost _____ RR River Hwy
Sec. _____ Twp. _____ Range _____
6. Area Involved: Highway Rail
 Waterway Other Vacant lot

7. Material(s) Involved: Unknown
Believed to be powdered metal
 Gas Liq. Semisolid Solid

8. Label: Placard (UN/NA)
radioactive I II III
9. Container: Truck RR car Drum
 Above grnd tank Pipeline
 Under grnd tank Pipe Other Unknown
container size: Unknown
Amount released: Unknown

Rate of release: _____ /min.
10. Cause of release: Illegal dumping

11. Estimated spill extent: 160,000
 square feet square yards
12. Occurred: Over time 6/12/88
Discovered: 16:25 6/12/88

13. Local response units contacted
 Fire N. Chicago
 Sheriff _____
 Police N. Chicago
 Local ESDA N. Chicago
 Other IEPA - Haz-mat

ERU received: 16:00 6/12/88
Duty Officer: Brutlag

18. On scene phone: None
19. Contact: None
20. No. injured: 0 Extent of: _____

Where taken: _____

21. Public safety concerns: From burns - Have police watch
 Haz-mat related

22. What state assistance needed? IEPA to investigate

23. Containment/cleanup action & plan: Unknown at time of report.

24. Responsible party: Unknown

25. Cause of release: Illegal dumping

26. Incident terminated locally:
Time: _____ by whom: _____

On scene responders:
 Fire N. Chicago
 Sheriff _____
 Police N. Chicago
 Local ESDA _____
 Other _____

LOG OF EVENTS

over

LOG OF EVENTS

TIME	WORK HRS.
6-15-88	BPR, DTK, EO met with Keith Humphries, Haz. Mat. to N. Chicago F.O. Inspected vacant lot directly west of the FONSTEEL facility on 22nd St. Area was filled 10 years ago with what appears to be materials similar to flyash, foundry sand. On 6-12-88, N. Chicago F.O. responded to site concerning a brush fire, and discovered that the fill materials were burning, basically an underground fire, subsurface temperature exceeded 220°F. The fire area extends along the ravine for ~ 200 feet, with the depth of the fill around 10 feet. Advised F.O. to monitor the site and try to discover the current property owner. IEPA collected (3) samples and will analyse for RCRA E.P.TX metals.
6-17-88	X 101 Pb 23.3 ppm X 102 < X 103 Pb 103 ppm
6/21/88 11:00	DTK inspects with Keith Humphries ① North Chicago has located an owner - Stock (go?) Realty may be an PRP for the site. ② DTK suggests a Thursday meeting between the Agency, City and the PRP ③ Storm fence had been erected to secure the site Conditions are similar to the 6-15-88 inspection ④ The west bank of the aforementioned creek may also have similar materials buried (no fire).

over

LOG OF EVENTS

TIME	WORK HRS.
1-28	Meeting with PRP and Northern Trust who controls the property. Outlining the two phases of work need at site. The first is to put out ground fire. The second is to remediate the site. A list of contractors was then presented to the PRP.
2:00	PRP called to inform them the Agency that Alyssio was hired. Scope of work presented.
	Fax to 639 1520 639 2510 JOHN M. HAKES Message
	Vice President Northern Trust Bank/Lake Forest Deerpath & Bank Lane, Lake Forest, IL 60045 (312) 234-5100 Direct: 295-4355
7-1	MacCormick to investigate site. Determine extent of fire and take corings in order to determine the type of material.
7-6	Report by MacCormick that no evidence of fire found. Samples taken of soils. No results as of yet. Reported findings to Keith Humphries of N.C.F.O.
7-18	EO - Spoke to Keith Humphries. No flare ups. No fires noted.
	Case referred to DLPC

Black Copy -
IDPH Dept of Public Health
Yellow Copy - Well Contractor
Blue Copy - Well Owner

INSTRUCTIONS TO DRS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well

- a. Dug . Bored . Hole Diam. 5 in. Depth 154 ft.
Curb material . Buried Slab: Yes No
- b. Driven . Drive Pipe Diam. in. Depth ft.
- c. Drilled . Finished in Drift . In Rock
Tubular . Gravel Packed
- d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)

2. Distance to Nearest:

- Building Ft. Seepage Tile Field
- Cess Pool Sewer (non Cast iron)
- Privy Sewer (Cast iron)
- Septic Tank Barnyard
- Leaching Pit Manure Pile

3. Well furnishes water for human consumption? Yes No

4. Date well completed 11/23/77

5. Permanent Pump Installed? Yes Date 12/16/77 No
Manufacturer Red Jacket Type subm. Location
Capacity 10 gpm. Depth of Setting 105 Ft.

6. Well Top Sealed? Yes No Type

7. Pitless Adapter Installed? Yes No
Manufacturer Williams Model Number
How attached to casing? clamp

8. Well Disinfected? Yes No

9. Pump and Equipment Disinfected? Yes No

10. Pressure Tank Size 82 gal. Type Well-X-Trol
Location

11. Water Sample Submitted? Yes No

REMARKS:

INSTRUCTIONS TO DR RS

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Non-Responsive

- Driller HENRY BOYSEN CO. License No. 102-6
 11. Permit No. 65129 Date 8/11/77
 12. Water from Gravel-Sand Formation 13. County Lake
 at depth 148 to 154 ft.
 14. Screen: Diam. 5 in.
 Length: 3 ft. Slot 10

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
<u>5</u>	PVC	grade	<u>152</u>

16. Size Hole below casing: 5 in.

17. Static level 57 ft. below casing top which is 1 ft.
 above ground level. Pumping level ft. when pumping at 20 gpm for hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Brown Clay	<u>13</u>	<u>13</u>
Blue Clay	<u>115</u>	<u>148</u>
Gravel - Lt. Sand	<u>6</u>	<u>154</u>

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED K. Richter DATE 1/25/78

White Copy -
Ill. Dept. of Public Health
Yellow Copy - Well Contractor
Blue Copy - Well Owner

INSTRUCTIONS TO DRS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well

- a. Dug Bored Hole Diam. 5 in. Depth 158 ft.
Curb material Buried Slab: Yes No
- b. Driven Drive Pipe Diam. in. Depth ft.
- c. Drilled Finished in Drift In Rock
Tubular Gravel Packed
- d. Grout:

(KIND)	FROM (FT.)	TO (FT.)

2. Distance to Nearest:

- Building Ft. Seepage Tile Field
- Cess Pool Sewer (non Cast iron)
- Privy Sewer (Cast iron)
- Septic Tank Barnyard
- Leaching Pit Manure Pile

3. Well furnishes water for human consumption? Yes No

4. Date well completed 8/21/85

5. Permanent Pump Installed? Yes Date 8/15/85 No

Manufacturer TAIT Type Subm Location

Capacity 10 gpm. Depth of Setting 100 ft.

6. Well Top Sealed? Yes No Type

7. Pitless Adapter Installed? Yes No

Manufacturer WILLIAMS Model Number

How attached to casing? clamp

8. Well Disinfected? Yes No

9. Pump and Equipment Disinfected? Yes No

10. Pressure Tank Size 120 gal. Type WELL-X-TROL

Location

11. Water Sample Submitted? Yes No

REMARKS:

County #27296

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Non-Responsive

Driller George E. Baffler License No. 102-239-2

11. Permit No. 117775 Date 5/10/85

12. Water from Sand & Gravel 13. County Lake

Formation at depth 151 to 158 ft.

14. Screen: Diam. 5 in.
Length: 3 ft. Slot 10

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (ft.)	To (ft.)
5	PVC	+2	156

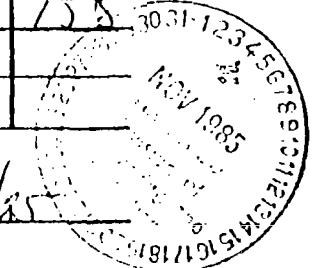
16. Size Hole below casing: 5 in.

17. Static level 71 ft. below casing top which is +2 ft. above ground level. Pumping level ft. when pumping at 5 GPM for hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Brown Clay	0	10
Blue Clay	14	.24
Sand + fine gravel	3	.27
Blue clay	11	132
Blue clay - Gravel	11	149
Blue clay	2	151
Sand + gravel	7	158

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED George E. Baffler DATE 11/10/85



White Copy -
Ill. Dept of Publ. Health
Yellow Copy - Well Contractor
Blue Copy - Well Owner

INSTRUCTIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well

- a. Dug Bored Hole Diam. 5 in. Depth 145 ft.
Curb material Buried Slab: Yes No
b. Driven Drive Pipe Diam. in. Depth ft.
c. Drilled X Finished in Drift X In Rock
Tubular Gravel Packed
d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)

2. Distance to Nearest:

- Building Ft. Seepage Tile Field
Cess Pool Sewer (non Cast iron)
Privy Sewer (Cast iron)
Septic Tank Barnyard
Leaching Pit Manure Pile

3. Well furnishes water for human consumption? Yes X No

4. Date well completed 6/22/78

5. Permanent Pump Installed? Yes X Date 6/28/78 No

Manufacturer Red Jacket Type Subm. Location
Capacity 10 gpm. Depth of Setting 100 Ft.

6. Well Top Sealed? Yes X No Type

7. Pitless Adapter Installed? Yes X No

Manufacturer Williams Model Number
How attached to casing? clamp

8. Well Disinfected? Yes X No

9. Pump and Equipment Disinfected? Yes X No

10. Pressure Tank Size 82 gal. Type Well-X-Trol

Location

11. Water Sample Submitted? Yes X No

REMARKS:

INSTRUCTIONS TO DRILLERS

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Non-Responsive

1. Driller J. P. LICHTER License No. 102-6
2. Permit No. 65136 Date 8/11/77
3. Water from Gravel 13. County Lake
Formation at depth 138 to 145 ft.
4. Screen: Diam. 5 in.
Length: 3 ft. Slot 10

Non-Responsive

15. Casing and Liner Pipe

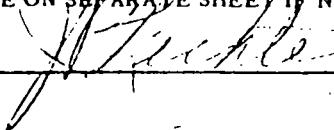
Diam. (In.)	Kind and Weight	From (Ft.)	To (Ft.)
5	PVC	grade	143

16. Size Hole below casing: 5 in.

17. Static level 52 ft. below casing top which is 1 ft.
above ground level. Pumping level ft. when pumping at 10+
gpm for hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
Brown Clay	6	6
Blue Clay	132	138
Gravel	7	145

(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED  DATE 10/23/78

White Copy -
Ill. Dept. of Publ. Health
Yellow Copy - Well Contractor
Blue Copy - Well Owner

INSTRUCTIONS TO DRILLER

FILL IN ALL PERTINENT INFORMATION REQUESTED AND MAIL ORIGINAL TO STATE
DEPARTMENT OF PUBLIC HEALTH, CONSUMER HEALTH PROTECTION, 535 WEST
JEFFERSON, SPRINGFIELD, ILLINOIS, 62761. DO NOT DETACH GEOLOGICAL/WATER
SURVEYS SECTION. BE SURE TO PROVIDE PROPER WELL LOCATION.

ILLINOIS DEPARTMENT OF PUBLIC HEALTH
WELL CONSTRUCTION REPORT

1. Type of Well

- a. Dug _____. Bored _____. Hole Diam. _____. Depth _____. ft.
Curb material _____. Buried Slab: Yes _____. No _____.
b. Driven _____. Drive Pipe Diam. _____. in. Depth _____. ft.
c. Drilled Finished in Drift In Rock _____.
Tubular _____. Gravel Packed _____.
d. Grout:

(KIND)	FROM (Ft.)	TO (Ft.)
CLAY SLUNNY	0	20

2. Distance to Nearest:

- Building 40 Ft. Seepage Tile Field 85
Cess Pool _____ Sewer (non Cast iron) _____
Privy _____ Sewer (Cast iron) _____
Septic Tank 75 Barnyard _____
Leaching Pit _____ Manure Pile _____
3. Well furnishes water for human consumption? Yes No _____.
4. Date well completed 7/9/87
5. Permanent Pump Installed? Yes Date 7/9/87 No _____.
Manufacturer DELTA Type SUB Location _____
Capacity 10 gpm. Depth of Setting 100 Ft.
6. Well Top Sealed? Yes No _____ Type _____
7. Pitless Adapter Installed? Yes No _____
Manufacturer WILLIAMS Model Number BROADUS
How attached to casing? _____
8. Well Disinfected? Yes No _____
9. Pump and Equipment Disinfected? Yes No _____
10. Pressure Tank Size 40 gal. Type AIR BLANKET
Location CLOSET SPACE
11. Water Sample Submitted? Yes _____ No

REMARKS:

Co # 29741

GEOLOGICAL AND WATER SURVEYS WELL RECORD

10

GEOLOGICAL AND WATER SURVEYS WELL RECORD

Non-Responsive

Driller KEN BOYLE License No. 192-006808
11. Permit No. 133245 Date 7/9/87
12. Water from SAND Formation 105 to 108 ft.
13. County LAKE

Non-Responsive

15. Casing and Liner Pipe

Diam. (in.)	Kind and Weight	From (Ft.)	To (Ft.)
<u>5</u>	<u>ASTM A-107 L</u>	<u>0</u>	
	<u>VSPD</u>		
	<u>15 lbs per ft</u>		

16. Size Hole below casing: 5 in.

17. Static level 100 ft. below casing top which is 1 ft.
above ground level. Pumping level 100 ft. when pumping at 12
gpm for 2 hours.

18. FORMATIONS PASSED THROUGH	THICKNESS	DEPTH OF BOTTOM
<u>TOP SOIL & FILL</u>	<u>3</u>	<u>3</u>
<u>YELLOW CLAY</u>	<u>16</u>	<u>19</u>
<u>BLUE CLAY</u>	<u>47</u>	<u>66</u>
<u>HANOPPAH</u>	<u>4</u>	<u>70</u>
<u>BLUE CLAY</u>	<u>6</u>	<u>76</u>
<u>MICLAY SAND</u>	<u>2</u>	<u>78</u>
<u>BLUE CLAY</u>	<u>17</u>	<u>95</u>
<u>MICLAY SAND</u>	<u>10</u>	<u>105</u>
<u>SAND</u>	<u>3</u>	<u>108</u>

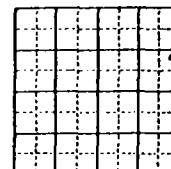
(CONTINUE ON SEPARATE SHEET IF NECESSARY)

SIGNED Kenneth D. Boyle DATE 7/9/87

ILLINOIS GEOLOGICAL SURVEY, URBANA

	Thickness	Top	Bottom
Drift		0	159
Silurian		159	400
Maquoketa		400	555
Galena-Platteville		555	861
Glennwood - St. Peter		861	1059
Franconia		1059	1171
Ironton-Galesville		1171	1268
Lime, Shale		1268	1276
			TD
Casing: 12" - 163'			
10" - 595'			
8" - 1015-1097'			
Hole Record 12" 0-595'			
10" 595-1097'			
8" 1097-1276'			
Water from 861' to 1268'			
Nonpumping water level 310' below ground level on December 10, 1970			
Pumping water level 441' below ground level on December 10, 1970			
Pumping rate 250 gallons per minute on December 10, 1970 at 16 hours.			
Pump type and make: Webtrol Submersible.			
Depth of pump setting: 500'			
Tank size and type: 10,000 gallons '0' pressure			
Surface installation: tubbs pitless 4" drop, discharge, and pickup.			
Drilled for industrial purposes, cooling of metal castings, etc.			
SS# 57304			
NO ENVELOPE			

COMPANY Raymond C. Hoover
 FARM North Chicago Refiners
 DATE DRILLED NO. 3065
 AUTHORITY COUNTY NO.
 ELEVATION
 LOCATION 1500' N line, 200' E line of NE
 COUNTY TAKE



TOWN Waukegan, TOWNSHIP
COMPANY American Steel & Wire Works

FARM

AUTHORITY

ELEVATION

COLLECTOR 595.2

MAP No. 8
12E45
N
33.HOLE No. 1
DATE DRILLED

(575-5M-7-23)

No.	COUNTY NO.	STRATA	THICKNESS		DEPTH	
			FEET	IN.	FEET	IN.
	1779	All depth taken from 20" above Std. Ga. Track.	74	6	80	
		Sand and gravel (5'6"-80) 8" pipe	60		140	
		12" pipe/ Casing	210		350	
		Niagara . 8" pipe. 12"bore	142		492	
		Lime rock. 8" pipe.10" "	368		860	
		Shale. 8" pipe 10" bore				
		Trenton limerock.				
		8" bore				
		Sand rock. 8" bore	66		926	
		Marl, red	22		948	
		Quick sand, gray. 6" pipe liner	20		968	
		Sand rock, gray. 6" bore	632		1600	
		Sand rock, red	10		1610	
		Sand rock, white	70		1680	
		Sand, rock, red	15		1695	
		Sand rock, white	40		1745	
		Sand rock, red	15		1760	
		Sand rock, white	50		1810	
		Sand rock, red	10		1820	
		Sand rock, white	85		1905	
		Sand rock, red	15		1920	
		Sand rock, white. Bottom of well. Previous to 1923. 26 gal. per min. Before cleaning. 40 gal per min. after cleaning and inserting liner			1933	
					2035	
		Sand rock, red	85		2060	
		Sand rock, white. More water	30		2090	
		Sand rock, red. 6"bore	63		2153	
		Well plugged here to maintain flow of water				
		45 gal. per min. Gray sandy shale	10883			

County 45 gal. per min. Gray sandy shale
DRILL RECORD 1 1/2" dia. 3 1/2" P.M. 2153

SHEET 2 T.45N R. 12E S.33
COMPANY American Steel and Wire Works
HOLE NO. 1

No.	STRATA	THICKNESS		DEPTH	
		FEET	IN.	FEET	IN.
	Gray sandy shale (flow 38 gallons per minute) <i>Was plugged back to 2153</i>	40		2153-2193	

County Lake Index No. 0688
T-DRILL RECORD 33-45N-12E

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY

Reference 7

TELEPHONE CONVERSATION RECORD

Lake
COUNTYDIFC / RPMS
DIVISION

Tomatis (N. Chic.) | ILD 005130786 | I. D. or FILE NO.

Re: Thawkaami Water SupplyConversation with: Isaac Chon Jr - Thawkaami Water Treatment Plant

- () I Called Party () Party Called Me DATE 1/12/91 TIME 9:20 AM
() Complainant () Violator () Public Inquiry () Partitioner

What I Said:

What Other Party Said:

① IntroductionWhere does City of Thawkaami get its water?

Get all water from Lake Michigan - Have 3 intakes 2 for emergency, the one in the basin wouldn't work at all.

The main intake is 48'
(40 mill gal/day)

One
The emergency intake is 1800' from water plant -
Never used it.

③ About how many people does the water from Thawkaami serve?

About 70,000.
Supply
Also ~~part~~ water to
Park City + Munroe

⑤ Do you know of any points where used in Thawkaami (esp. south part)?

⑥ A continuation on Washington use reverse side if necessary

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY

TELEPHONE CONVERSATION RECORD

LAKE
COUNTY

DILPC / RPMS
DIVISION

FANSTFEL / ILD 005130786 I. D. or FILE NO.

Re: Gurnee Water Supply

Conversation with: Nancy Thompson of Gurnee

() I Called Party () Party Called Me DATE / 1/28/91 TIME :

() Complainant () Violator () Public Inquiry () Partitioner

What I Said:

What Other Party Said:

① Introduction

What does Village of Gurnee
get their water?

② Most water from
Waukegan
Have emergency source for
summer - have 2 wells -
One was used all the time until
pump went out (Nov '90) but
down to bottom of well since
The other just used in emerg -
had last summer - Aug
for short periods. When
used, the main well 80% take
a 20% well.

③ Any private wells you
not you know of?

④ Possibly a few art. wells -
residences mostly in N.E.
corner of village.
use reverse side if necessary

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY

TELEPHONE CONVERSATION RECORD

Dake _____
COUNTY

LPC / RPMS
DIVISION

FANSTEEL (in N. Chicago) / ILD005130786 I. D. or FILE NO. _____

Re: Park City, IL Water supply

Conversation with: Resident of City Hall (Park City)

() I Called Party () Party Called Me DATE 1/12/91 TIME : :

() Complainant () Violator () Public Inquiry () Partitioner

What I Said:

What Other Party Said:

① Introduction

Where does Park City
obtain water?

② All water from
Waukegan.

③ Known of any private wells
in Park City?

④ There's an apt. complex
that is on a well - it's
in the process of taking
up w/ city.

⑤ When will that happen?

⑥ Probably within 2-3
months - maybe sooner.

⑦ Any homes have private wells?

⑧ Possibly one or two.
The meter man would
know more about it -
Gordon Kozidowski.

use reverse side if necessary

Jerry J. Trillie
Signature

IL 532-0727
EPA 129 (Rev. 1/81)

L.S.C.T.
Title

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY

TELEPHONE CONVERSATION RECORD

Lake County
COUNTY

D.L.P.C. / R.P.M.S.
DIVISION

For Tomated (N. Chicago) / ILD 005130786 I. D. or FILE NO.

Re: Lake Co. Public Works Water District

Conversation with: Rudy Parker of Lake Co. P.W. Works

(I Called Party) () Party Called Me DATE 1/12/91 TIME _____

() Complainant () Violator () Public Inquiry () Partitioner

What I Said:

What Other Party Said:

① Introduction

Can you help me get an idea
of the areas you supply w/
water?

② Serve discrete areas

Vernon Hills - west of the Toll
along ^{pt.} I70 → Keweenaw +
Rondout.

③ Do you know where Village
of Green Oaks gets water?

④ They have a small water
sys. - well water
from ~~an~~ west of town
around IL 137 + St. Mary's
Road.

⑤ Where does Lake Co. Public
Works get its water?

⑥ It comes from Lake
Michigan - from
North Chicago.

use reverse side if necessary

Rudy A. Triller
Signature

IL 532-0727
EPA 129 (Rev. 1/81)

L.S.C.T.
Title

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY

TELEPHONE CONVERSATION RECORD

Lake Co.
COUNTY

DIVISION / RPMS
DIVISION

Farmsteel (n. Chicago) / ILD 005130786 . I. D. or FILE NO. _____

Re: Lake Forest, IL water supply

Conversation with: Bill Hensel of Lake Forest Public Works

() I Called Party () Party Called Me DATE / 129191 TIME _____ :

() Complainant () Violator () Public Inquiry () Partitioner

What I Said:

What Other Party Said:

① Introduction.

Where does St. Forest get
water - One intake from
Lake Michigan?

I water intake
Sew. Lake Forest, Lake
Bluff, Del Mar Woods
(an unincorp. area so-100 homes.)
Sell to Lake Co. Public Works

③ Do you know of any private
wells in Lake Forest?

Don't know of private
wells - may be some but
very few if any.
Deerpath + Waukegan - the
estates being developed,
they may have wells.

use reverse side if necessary

Judy J. Trillin
Signature

IL 536-0727
EPA 129 (Rev. 1/81)

L.S.C.T.
Title

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY

TELEPHONE CONVERSATION RECORD

LAKE

COUNTY

DLPC / RPMS

DIVISION

Zonotell (N. Chicago) / ILR 005130786. I. D. or FILE NO. _____

Re: Knollwood water supply

Conversation with: Robert Loeel of Knollwood Fire Dept.

(I Called Party () Party Called Me DATE / 130191 TIME : :

() Complainant () Violator () Public Inquiry () Partitioner

What I Said:

What Other Party Said:

① Introduction

Can you tell me about
Knollwood water supply?

I understand you get

some water from Lake Co.

Public Works do the whole
village hooked up or are
there some private wells?

③ What's the population of
Knollwood?

Thanks for your help!

② There are quite a few
homes not on public
water.

④ Around 2000

use reverse side if necessary

Judy J. Tavel
Signature

IL 5320727
EPA 129 (Rev. 1/81)

L.S.C.T.
Title

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY

TELEPHONE CONVERSATION RECORD

LAKE

COUNTY

DLPC / RPMS
DIVISION

FANSTEEL / ILD 0051307860 I. D. or FILE NO.

Re: Drinking Water Sources / G.W. Use in Lake Bluff, IL

Conversation with: George Russell, Village Engineer

() I Called Party () Party Called Me DATE 1/30/91 TIME :

() Complainant () Violator () Public Inquiry () Partitioner

What I Said:

④ Introduction

I you get water from Lake
Forest. Do you know if there
are any homes in Lake Bluff on
priv. wells?

What Other Party Said:

② There are 35-40 homes w/
priv. wells - all on N. ~~limits~~
of village. 9 of these in process
of switching to city water.
Stone Acres, Wolf Creek, Basswood
Also 10-15 homes and the golf
course & that have wells -
these aren't actually
Lake Bluff limits.
There is 15-20 homes w/ wells
located in the area around
where Green Bay Rd. approaches
many tree prop. Also 10-15
south of Hwy - south of
golf course.

use reverse side if necessary

Judy J. Tamm
Signature

IL 532-0727
EPA 129 (Rev. 1/81)

L.S.C.T.
Title

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY

TELEPHONE CONVERSATION RECORD

Doe Co.
COUNTY

DLPC / RAMS
DIVISION

Farmers (7 Chicago) / ILD 005130786 I. D. or FILE NO.

Re: water supply to Baxter Health Care Corp.

Conversation with: Dave Sorenson

(I Called Party () Party Called Me DATE 1/30/91 TIME :

() Complainant () Violator () Public Inquiry () Partitioner

What I Said:

What Other Party Said:

① Introduction

How is water supplied to
Baxter?

② Have 2 deep wells
(about 1480') they serve
approx. 2500 people.

③ Can you tell me where
they are located?

④ Look at map. This is a
ridge on N edge of lake. One
well is: Along west edge
of lake about $\frac{3}{4}$ way down
from N edge of lake.

2nd well is: About $\frac{1}{2}$ way
between west edge of lake +
west edge of ridge - On north
edge of lake.

use reverse side if necessary

Judy J. Trice
Signature

IL 532-0727
EPA 129 (Rev. 1/81)

L.S.C.T.
Title

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY

TELEPHONE CONVERSATION RECORD

Dake
COUNTY

DLPC / RPMs
DIVISION

Fanstiel (D. Chicago) / ILD 005130786. I. D. or FILE NO.

Re: Water supply of Art. Dales Naval Training Center

Conversation with: Jerry Smith of Navy base Public Works Center

(I Called Party () Party Called Me DATE 2/11/91 TIME :

() Complainant () Violator () Public Inquiry () Partitioner

What I Said:

What Other Party Said:

① Introduction

Does navy base get all its
water from Lake Michigan?

② Yes. Lake Mich. is
my source.

③ How many people served?

④ About 25,000 - 30,000
serve. all on base,
including V.A. hospital

⑤ Known of any problems
last?

⑥ Don't know of any.

⑦ Is your water blended
with any other source.

⑧ No blending.
Do have connection w/
Milwaukee & D. Chicago.

Thank you for your help!

use reverse side if necessary

Judy J. Trillin
Signature

IL 632-0727
EPA 129 (Rev. 1/81)

I.S.C.T.
Title

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY

TELEPHONE CONVERSATION RECORD

LAKE COUNTY

D.L.P.C./RPMS
DIVISION

FANSTEEL (N. Chicago) / I.D. 005130786 I. D. or FILE NO.

Re: Zion-Benton Treatment Plant

Conversation with: Don White

(I Called Party () Party Called Me DATE 2/17/91 TIME :

() Complainant () Violator () Public Inquiry () Partitioner

What I Said:

What Other Party Said:

① Introduction

Do you have a water
store - what areas do
you serve?

② Sell water to
City of Zion, Illinois
Harrowell Beach State
Park.

③ How many people does
this water serve?

④ About 25,000

use reverse side if necessary

Quincy J. Justice
Signature

IL 582-0727
EPA 129 (Rev. 1/81)

L.S.C.T.
Title

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY

TELEPHONE CONVERSATION RECORD

Lake

COUNTY

DILPC / RPMS
DIVISION

Fonotrol (in Cinc. facility) ILD 005130786. I. D. or FILE NO.

Re: water supplies in Fonotrol area

Conversation with: Michael Kuhn at Lake Co. Health Dept.

() I Called Party (Party Called Me DATE 2/27/91 TIME 1:00 pm

() Complainant () Violator () Public Inquiry () Partitioner

What I Said:

What Other Party Said:

① Knowlwood + Rondout
get water from Lake Co
Public Works.
From what I understand
Lake Co. Pub Works owns
that area up to Atkinson
Road, which cuts through
sect. 13. North of there, homes
would be on private wells -
what homes there are -
is not developed.
To sect. 1, 2, 12, 13 (Not Atkinson)
industrial area Township
should be on wells.
I'm still not sure about
Stream Oaks - probably
private wells. Are you
use reverse side if necessary

Judy J. Triller
Signature

IL 532-0727
EPA 129 (Rev. 1/81)

L.S.C.T.
Title

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY

TELEPHONE CONVERSATION RECORD

Lake Co
COUNTY

OLPC / RPMS
DIVISION

Fansteel (N. Chic) / ILD 005130786 I.D. or FILE NO.

Re: status supply of Green Oaks (Village of)

Conversation with: Michael Kubin - Lake Co. Health Dept.

() I Called Party () Party Called Me DATE 2/27/91 TIME 1:20

() Complainant () Violator () Public Inquiry () Partitioner

What I Said:

What Other Party Said:

① I found out about
Green Oaks water
supply. The have a
record that says they're
on a public water supply
served by Lake Co. Public
Works.

That contradicts what
Public Works told me
about not serving
north of Otkinson Rd -
maybe they meant
east of 94.

I didn't call + verify
this - it's from records
here.

use reverse side if necessary

Judy J. Johnson
Signature

IL 532-0727
EPA 129 (Rev. 1/81)

L.S.C.T.
Title

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY

TELEPHONE CONVERSATION RECORD

Dake

COUNTY

DILPC / RPMS
DIVISION

Farmstead (7 Chic facility) ILD 005130786 I. D. or FILE NO.

Re: Avg. flow rate of Pettitome Creek

Conversation with: Vernon Knapp of State Water Survey (IL)

() I Called Party () Party Called Me DATE 2/28/91 TIME 1:15pm

() Complainant () Violator () Public Inquiry () Partitioner

What I Said:

What Other Party Said:

① You had called wanting an average flow for Pettitome Creek. It's a small creek. Which part of the stream were you interested in?

② I'm looking at the part of the creek about one mile from where it enters Lake Michigan - about from the point where it crosses under 22nd Street.

③ Okay. Well, it's a very small creek. I can calculate the flow for you - it will probably be less than 1 cfs.

④ Okay, all I need to know is its less than 10 cfs.

⑤ Yes, significantly less than 10 cfs.

⑥ Really that's all I need to know them - Thanks

use reverse side if necessary

Judie J. Trillie
Signature

IL 532-0727
EPA 129 (Rev. 1/81)

L.S.C.T.
Title

STATE OF ILLINOIS
ENVIRONMENTAL PROTECTION AGENCY

TELEPHONE CONVERSATION RECORD

Dake County
COUNTY

EPA / OLPC / RPMS
DIVISION

Zomarcel (D. Chicago fac) / ILD 005130 786. I. D. or FILE NO.

Re: Water supply of Village of Green Oaks

Conversation with: Rudy Parker of Dake Co. Public Works

(I Called Party () Party Called Me DATE 3/15/91 TIME 11:20 AM
() Complainant () Violator () Public Inquiry () Partitioner

What I Said:

What Other Party Said:

① Introduction

I talked with you earlier
that I still have a question
about Green Oaks water
supply.

② The village is in private
wells. There is one
division (about 20 homes
west of St. Martin Road
that has a small water
system - a well water
(from the county)

③ Thank You!

use reverse side if necessary



Abbott Laboratories
One Abbott Park Road
Abbott Park, Illinois 60064-3500

February 1, 1991

CERTIFIED MAIL

Ms. Judy Triller
Illinois Environmental Protection Agency
Division of Land Pollution Control
2200 Churchill Road
P.O. Box 19276
Springfield, IL 62794-9276

Re: Abbott Park Well Information

Dear Judy:

As you requested yesterday, below and attached are the Abbott Labs, Abbott Park, Well data.

Abbott Park is a campus type business center supporting mostly R&D and Corporate functions with some health care manufacturing. The Park is located southwest of and adjacent to the intersection of IL Routes 137 & 43 (between Libertyville and N. Chicago, IL). The current Abbott Park population is approximately 6,600.

There are 5 Wells at Abbott Park with Well Casing Depths of:

#1 = 169', #2 = 172', #3 = 354', #4 = 193', #5 = 195'.

This Well Water (#1-#5) is mixed with N. Chicago City Water (Community Water Source) approximately 50/50 to make Abbott Park Potable Water (Non-Community Non-Transient Water Source). This water is used for drinking, but there are additional higher water quality demands as this water is directly and indirectly used as make-up for demineralized and distilled process waters.

Attached is a map of Abbott Park with the 5 Well locations circled.

If you have any questions, please contact me at (708) 937-3045 or:

Abbott Laboratories
Bldg AP7, Dept 735
Abbott Park, IL 60064-3500.

Sincerely,

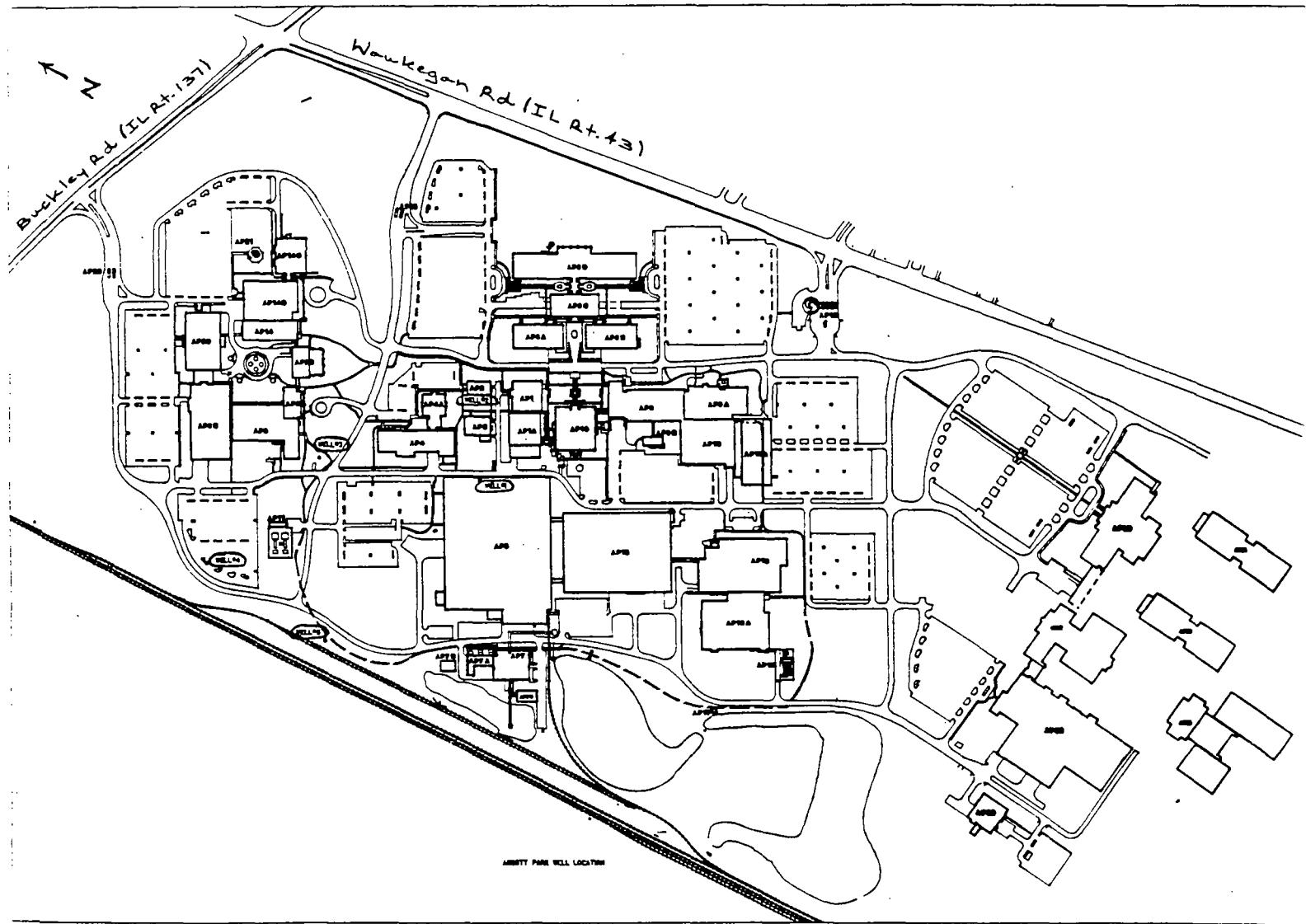
Sean E. McMahon

Sean E. McMahon
P Utilities Quality Engineer
EPADLPC

RECEIVED

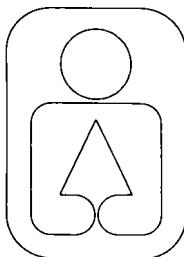
FEB 07 1991

IEPA/DLPC



/usr2/lisitem/apotresh.dgn Jan. 31, 1991 13:39:48

Illinois

**Department of Conservation**
life and land together

LINCOLN TOWER PLAZA • 524 SOUTH SECOND STREET • SPRINGFIELD 62701-1787
CHICAGO OFFICE • ROOM 4-300 • 100 WEST RANDOLPH 60601
MARK FRECH, DIRECTOR - KATHY SELCKE, ASSISTANT DIRECTOR

March 11, 1991

Judy Triller
Illinois Environmental Protection Agency
2200 Churchill Road
Springfield, IL 62794-9276

Dear Ms. Triller:

Enclosed, per your request, is information about endangered and threatened species and other sensitive natural features in the vicinity of a hazardous waste project site in North Chicago, Illinois. I have included only those features that are in or immediately adjacent to Pettibone Creek or the shore of Lake Michigan between the Illinois-Wisconsin border and Winnetka, Illinois.

Included in this packet are Element Occurrence Records for each of the endangered or threatened species documented in the area of concern. In some cases, you will notice there are several records for one species. Each record is for a different location of that species. The Element Occurrence Record includes information on the status and location of a listed species. The State Status may be LT (threatened) or LE (endangered). Location is given by township, range, section as well as by latitude and longitude. General directions from a nearby city or other landmark are also included. If you have questions about the information on these printouts, please call. None of the species described on these reports are candidates for listing by the federal government.

Also included are copies of topographic maps showing the location of eight natural areas in the area of concern. Only those natural areas which include Lake Michigan beach front are included. The natural areas are colored or outlined with yellow on the enclosed maps.

Two dedicated nature preserves also fall within the area being reviewed. Maps with the preserves outlined in green are enclosed. Illinois Beach Nature Preserve includes a portion of the inventoried natural area at Illinois Beach State Park. The North Dunes Nature Preserve is a part of the North Dunes natural area.

There is no critical habitat for federally designated endangered

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MAR 14 1991

IEPA/DLPC

or threatened species or habitat known to be used by federally listed species in the area of concern. There are no federal or state designated Scenic or Wild Rivers.

The enclosed materials include all pertinent information which can be gleaned from the Illinois Natural Heritage Database. If you have other questions for which we may be able to provide answers, please give us a call.

Sincerely,

Glen Kruse

Glen Kruse
Project Manager

Enclosures

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Illinois



Department of Conservation

life and land together

LINCOLN TOWER PLAZA • 524 SOUTH SECOND STREET • SPRINGFIELD 62701-1787
CHICAGO OFFICE • ROOM 4-300 • 100 WEST RANDOLPH 60601
MARK FRECH, DIRECTOR - KATHY SELCKE, ASSISTANT DIRECTOR

ENDANGERED SPECIES CONSULTATION AGENCY ACTION REPORT

Date Submitted: 2-7-91

PROJCODE: _____
Date Due: _____

For Office Use Only

Agency Name: IL. Environ. Protection Agency
Contact Person: Judy Triller Phone: 782-6760
Agency Address: 2200 Churchill Road Spfld IL 62794-9276

DESCRIBE PRECISE LOCATION OF PROPOSED ACTION

County(ies): Lake Co
City/Town: North Chicago
Township/Range/Section: 44 N, 12 E, Sec. 4
U.S.G.S. Quad Map Name(s): Waukegan, IL Quad.
Brief Description of the Proposed Action: See Attachment

Please enclose a map delineating the location of the proposed action.

FOR NATURAL HERITAGE USE ONLY

QUADCODE(S): 4108747 4108777 4108737 4108716

Are there threatened/endangered species or natural areas located within the vicinity of the project? Yes No
If "Yes", the consultation process should continue. If "No", the consultation process is terminated.

Evaluation Approved by:

Deanna Glosser

Deanna Glosser, Ph.D.

Endangered & Threatened Species Program Manager

3-11-91

Date

County Lake

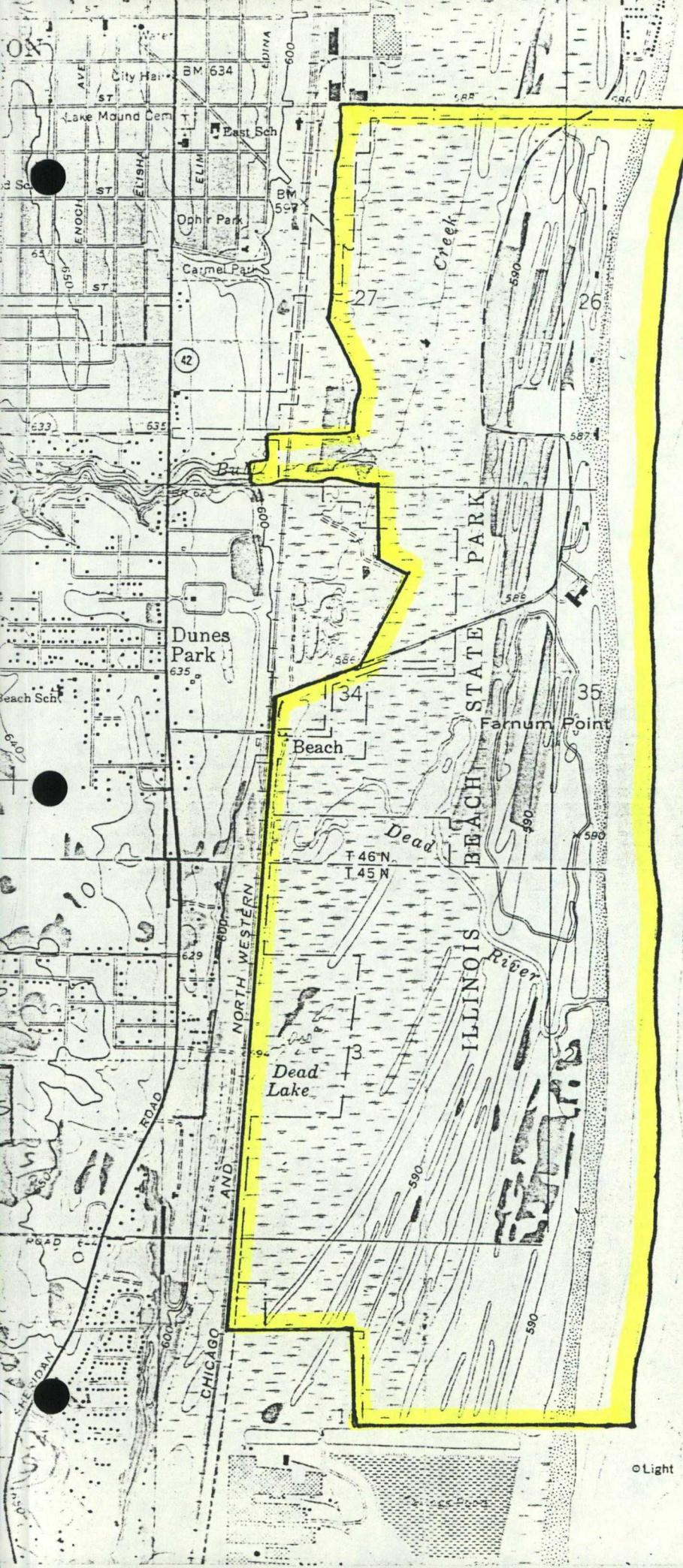
No. 42

Name of Area ILLINOIS BEACH NATURE PRESERVE

Quadrangle ZION 7,5'

Location SEC. 2,3,10,11, T45N, R12E; SEC. 26,27,34,35, T46N, R12E

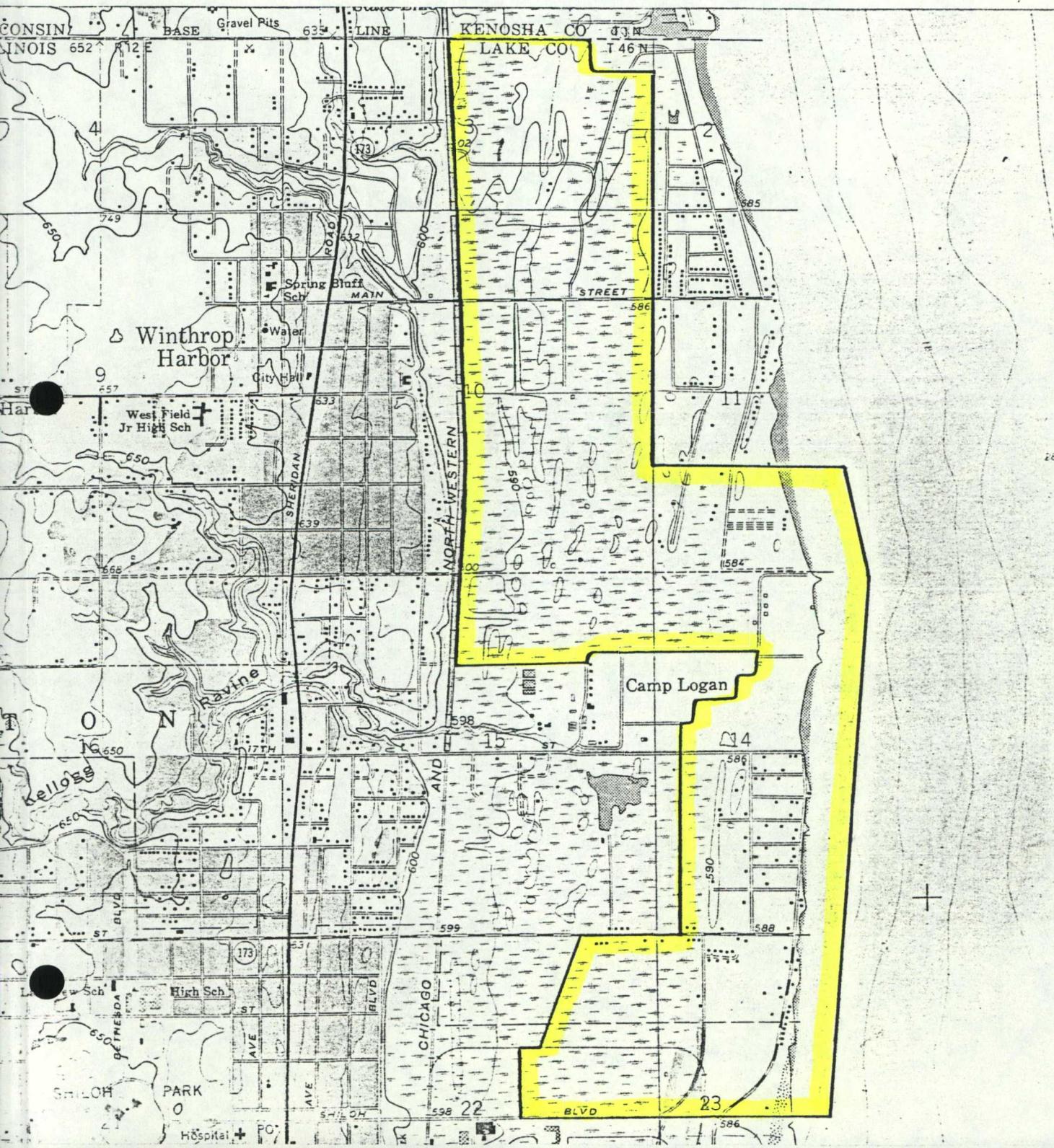
ILLINOIS NATURAL AREAS INVENTORY



1
County LAKE
Name of Area ILLINOIS DUNES NORTH
Quadrangle ZION 7.5'
Location SEC. 3,10,11,14,15,22 & 23, T46N, R12E

No. 130

ILLINOIS NATURAL AREAS INVENTORY



County Lake

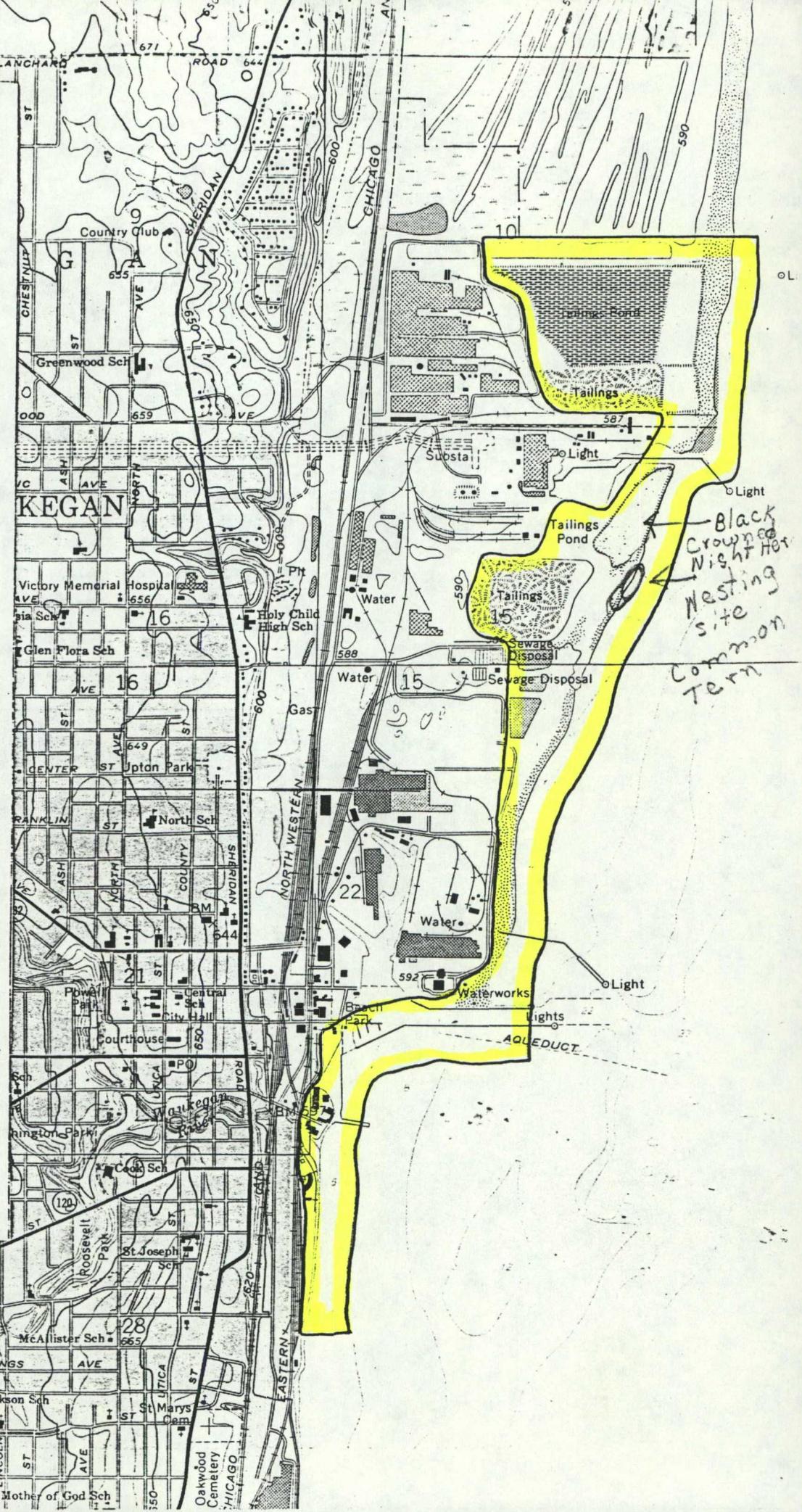
Name of Area _____ WAUKEGAN BEACH

Quadrangle ZION 7.5' & WAUKEGAN 7.5'

Location SEC. 10, 15, 21, 22, 28, 29 T45N, R12E

ILLINOIS NATURAL AREAS INVENTORY

No. 253



1
County LAKE

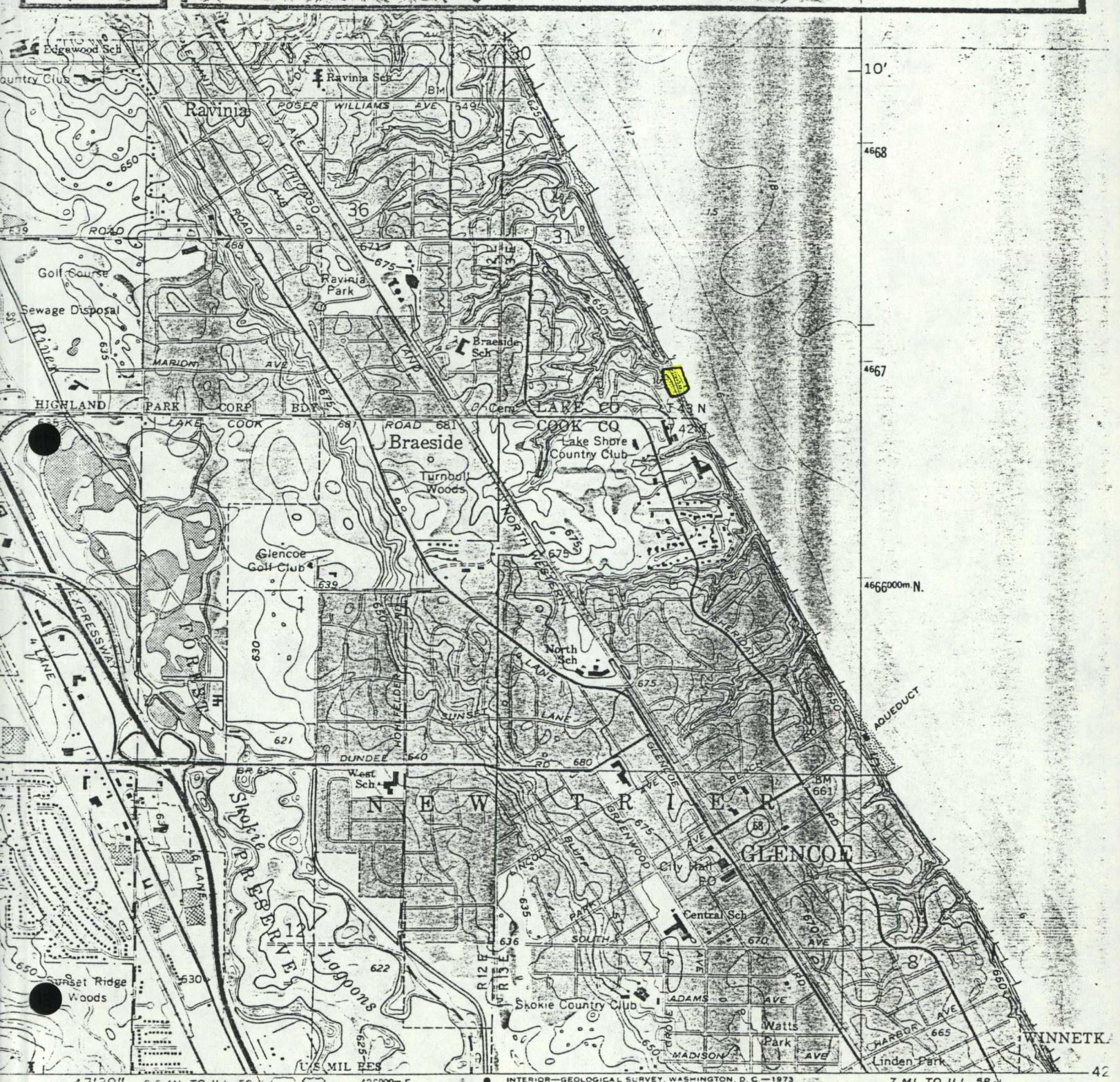
No. 122

Name of Area RAVINIA BLUFF

Quadrangle HIGHLAND PARK 7.5'

Location SEC. 31, T43N, R13E

ILLINOIS NATURAL AREAS INVENTORY



47°30" 29 MI. TO ILL. 50
CHICAGO (LOOP) 21 MI.

94 41

43600m.E.

INTERIOR-GEOLOGICAL SURVEY, WASHINGTON, D.C.-1973

87°45' 7 MI. TO ILL. 58

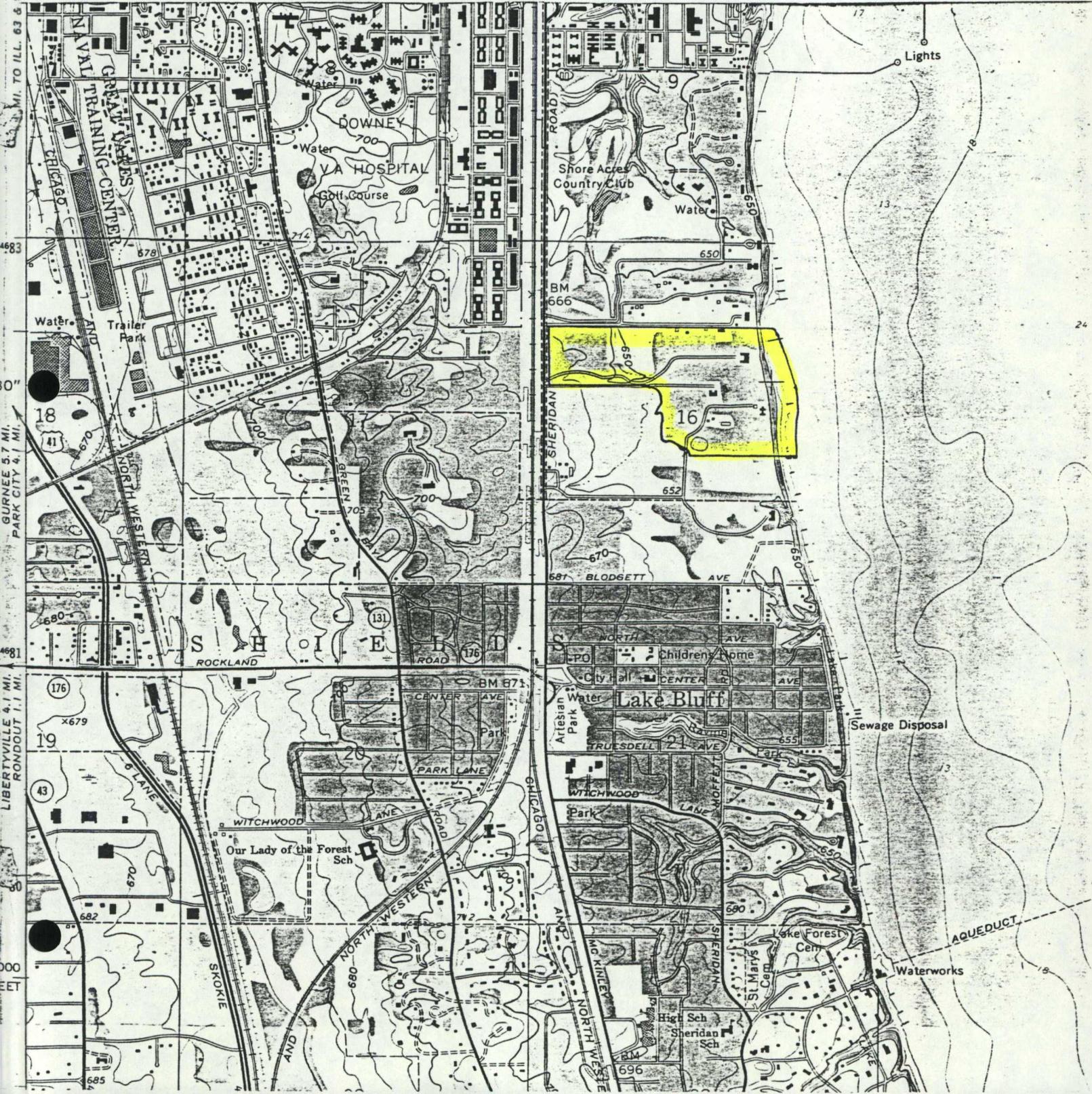
1 MILE

ROAD CLASSIFICATION

EVANST
34681

County LAKE No. 32
Name of Area BLAIR WOODS
Quadrangle WAUKEGAN 7.5'
Location SEC. 16 T44N, R12E

ILLINOIS NATURAL AREAS INVENTORY



County LAKE

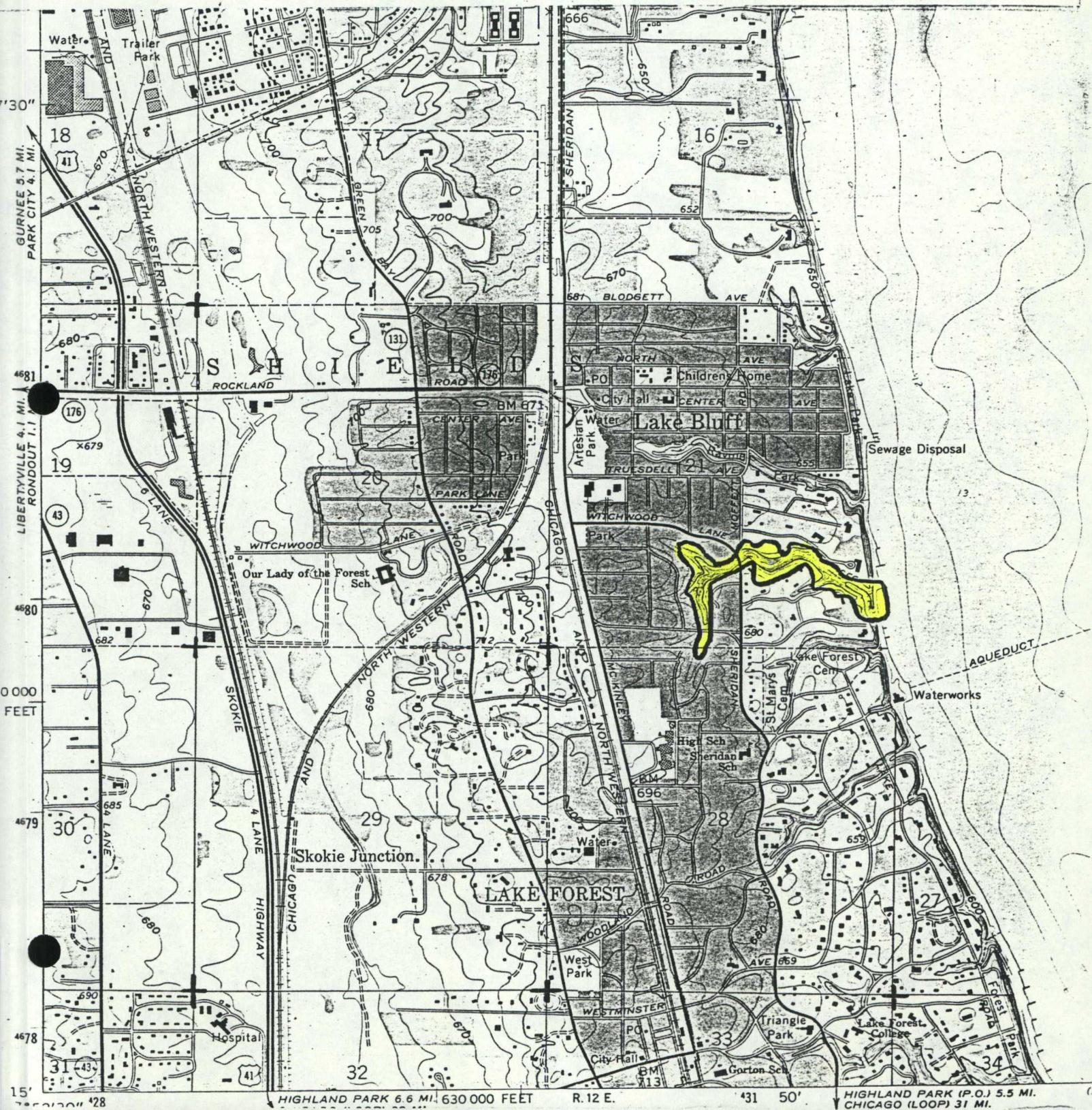
No. 87

Name of Area LAKE BLUFF WOODS
Scale WAUKEGAN 7.5'

Quadrangle

Location SEC. 21 AND 28, T44N, R12E

ILLINOIS NATURAL AREAS INVENTORY



County LAKE

LAKE

No. 119

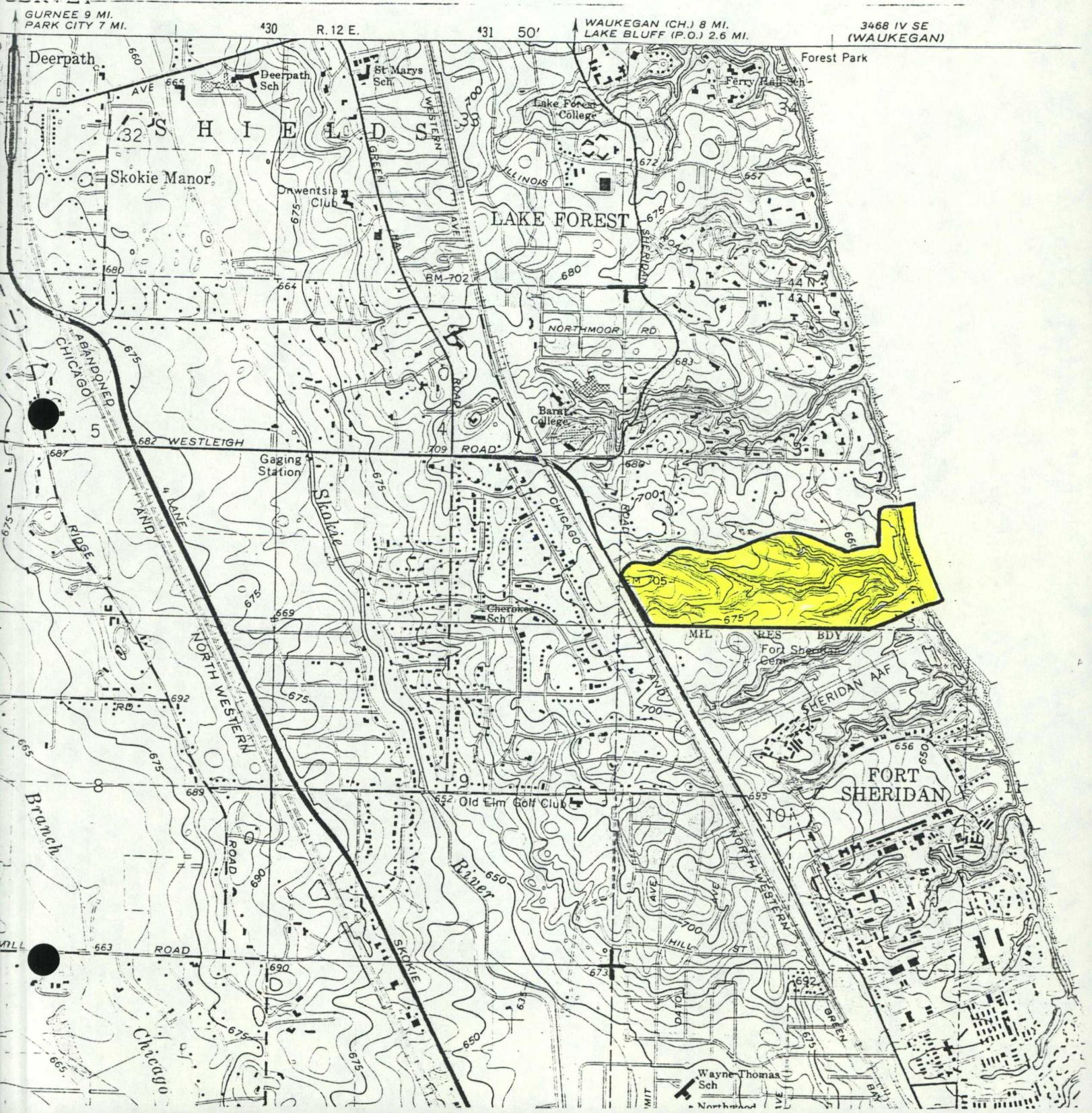
119

Name of Area McCORMICK NATURE PRESERVE

Quadrangle HIGHLAND PARK 7.5'

Location SEC. 3, T43N, R12E

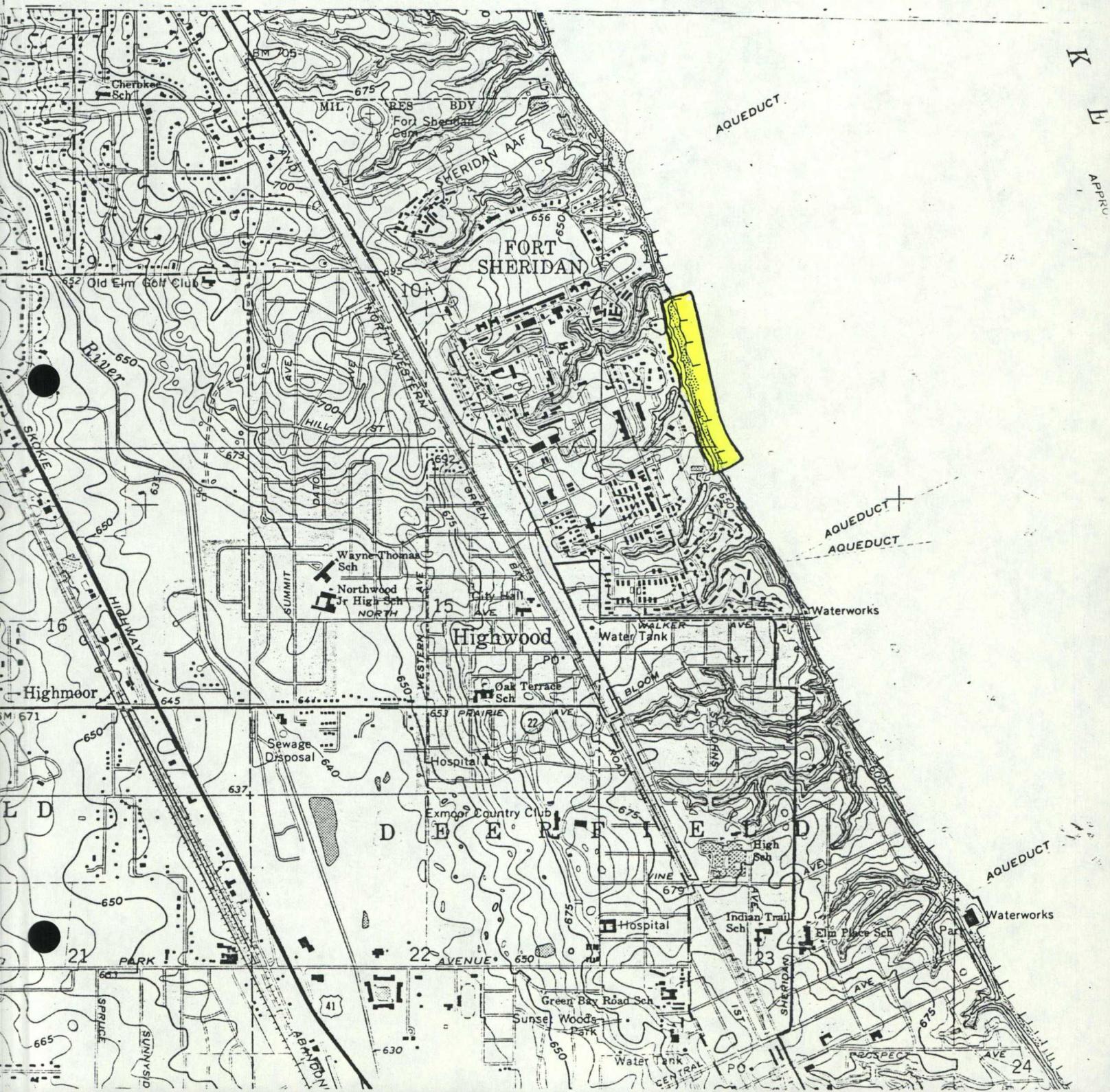
ILLINOIS NATURAL AREAS INVENTORY

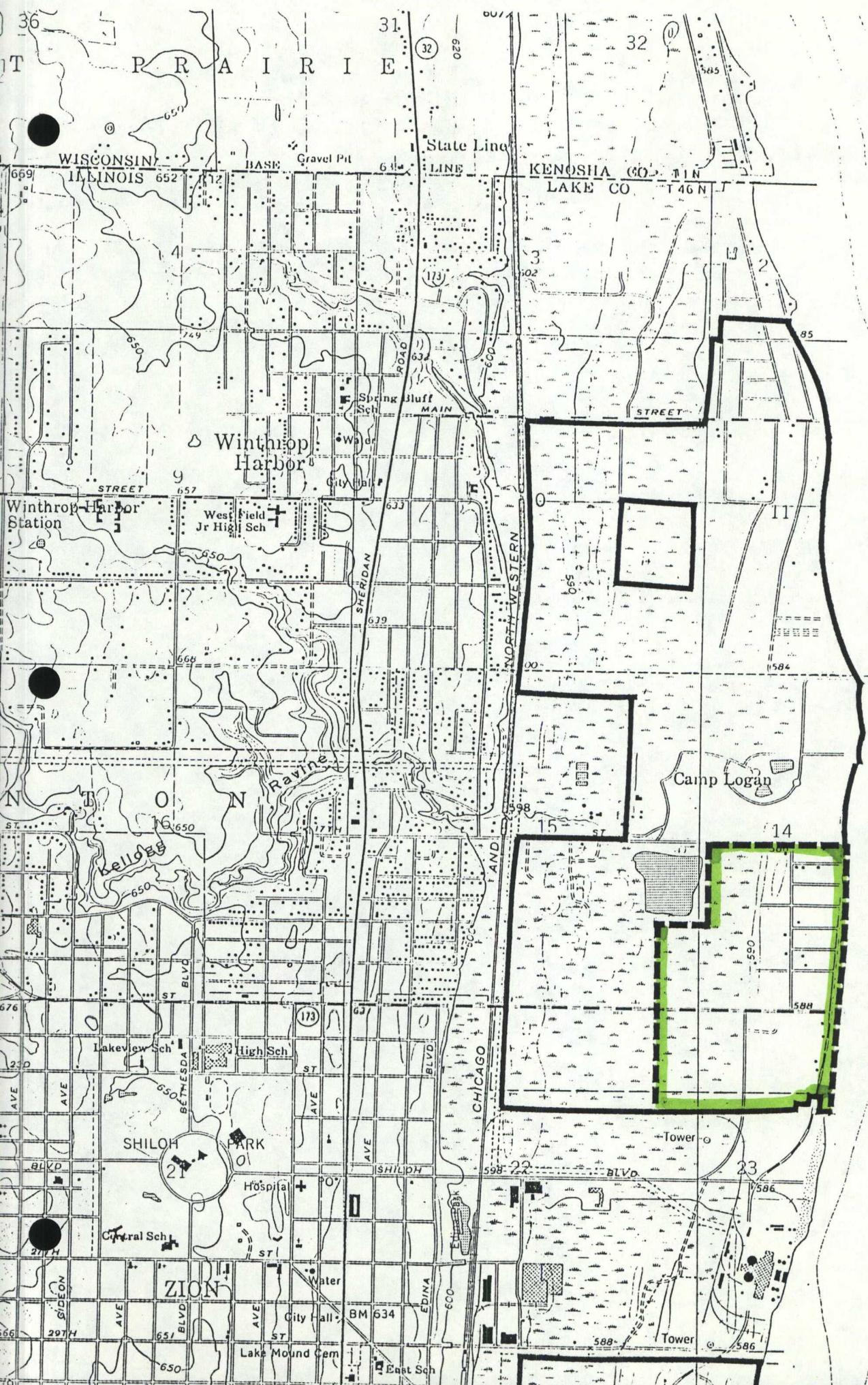


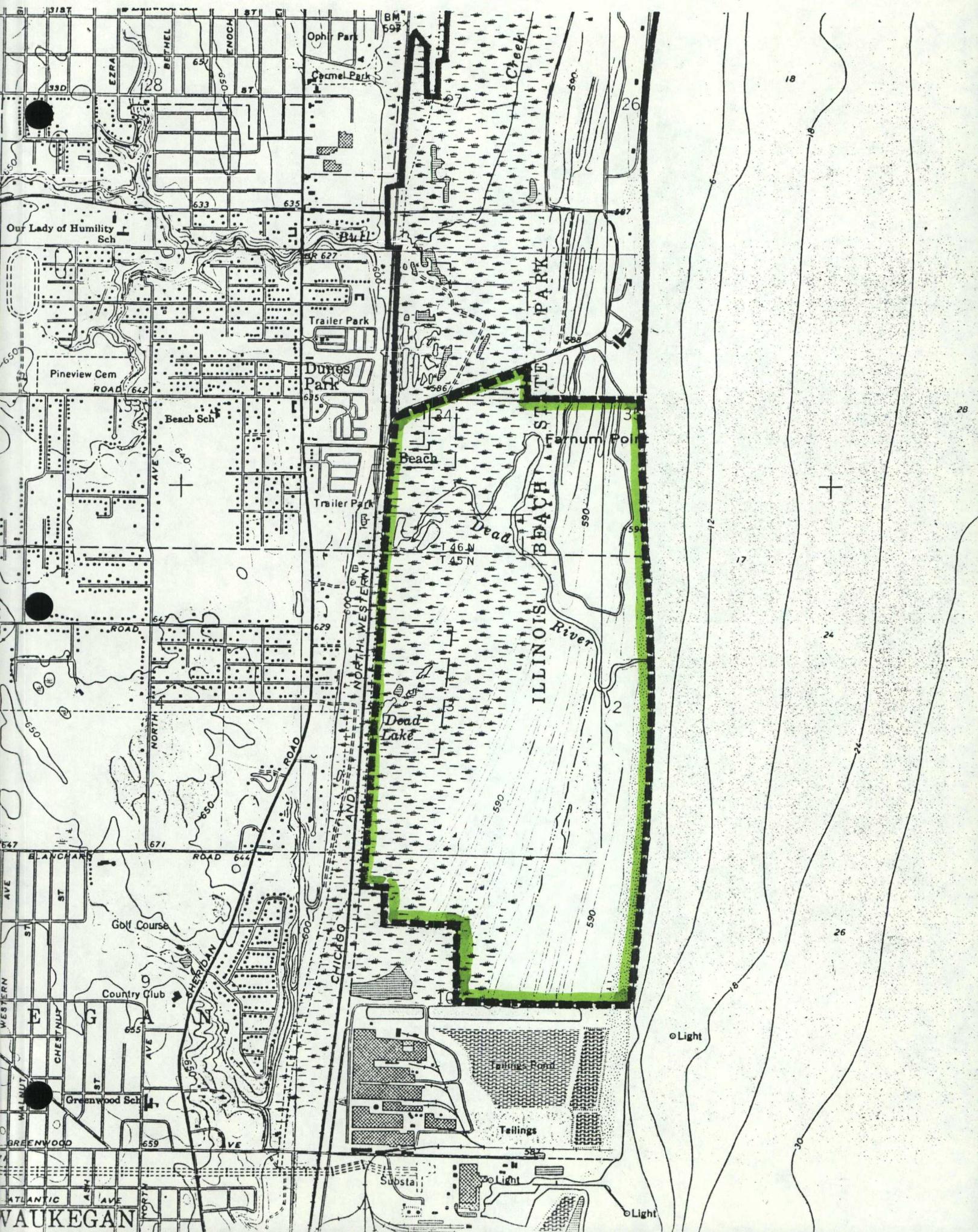
1

County LAKE No. 134
Name of Area FORT SHERIDAN BLUFF
Quadrangle HIGHLAND PARK 7.5'
Location Sec. 11 & 14, T43N, R12E

ILLINOIS NATURAL AREAS INVENTORY







ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: AFCHA01020*001*IL
NAME: COREGONUS ARTEDII
CISCO OR LAKE HERRING

-----ELEMENT STATUS-----

Federal Status: State Status: LT
Global Rank: G5 State Rank: S3

-----LOCATORS-----

Site Name: ILLINOIS BEACH
Survey Site Name: LAKE MICHIGAN
County: Lake

Precision: M

7.5-minute Topographic Map	Quadrangle Code	Margin Number	Ten Ten
ZION	4208747	12	06,06

Latitude: 422610N South: 0N North: 0N
Longitude: 0874808W East: 00W West: 00W
Township-Range: 046N012E Section: 26 Meridian: 3P

Directions: Lake Michigan, 4 miles NE of Waukegan

Natural Division and Section: Watershed: 04060200
Specific Stream: Lake Michigan

-----STATUS-----

Survey Date: Date Last Observed: 1981-12-11
Year First Observed: Rank or Grade:
Rank Comments:
Data: fish collected

Contact: ()

-----DESCRIPTION-----

General Description:
Elevation: Size: 0

-----PROTECTION-----

Managed Areas	Contained
---------------	-----------

Management Comments:

Protection Comments:

-----COMMENTS-----

-----DOCUMENTATION-----

Data Sensitivity: (If "Y", be careful in releasing data)
Best Source: Illinois State Natural History Survey Fish Collection
Source Codes: ONDNHS03ILUS

Date Printed: MAR 11 1991

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ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: AFCHA01040*001*IL
NAME: COREGONUS CLUPEAFORMIS
LAKE WHITEFISH

-----ELEMENT STATUS-----

Federal Status: State Status: LT
Global Rank: G5 State Rank: S3

-----LOCATORS-----

Site Name: ILLINOIS BEACH
Survey Site Name: LAKE MICHIGAN
County: Lake

Precision: M

7.5-minute Topographic Map	Quadrangle Code	Margin Number	Ten Ten
ZION	4208747	13	06,06

Latitude: 422602N South: 0N North: 0N
Longitude: 0874808W East: 00W West: 00W
Township-Range: 046N012E Section: 26 Meridian: 3P

Directions: Lake Michigan; 4 miles NE of Waukegan

Natural Division and Section: Watershed: 04060200
Specific Stream: Lake Michigan

-----STATUS-----

Survey Date: Date Last Observed: 1979-09-01
Year First Observed: Rank or Grade:
Rank Comments:
Data: fish collected

Contact: ()

-----DESCRIPTION-----

General Description:
Elevation: Size: 0

-----PROTECTION-----

Managed Areas	Contained

Management Comments:

Protection Comments:

-----COMMENTS-----

-----DOCUMENTATION-----

Data Sensitivity: (If "Y", be careful in releasing data)
Best Source: Illinois State Natural History Survey Fish Collection
Source Codes: ONDNHS03ILUS

Date Printed: MAR 11 1991

ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: AFCJC02030*003*IL
NAME: CATOSTOMUS CATOSTOMUS
LONGNOSE SUCKER

-----ELEMENT STATUS-----

Federal Status: State Status: LT
Global Rank: G5 State Rank: S3

-----LOCATORS-----

Site Name: ILLINOIS BEACH

Survey Site Name: LAKE MICHIGAN

County: Lake

Precision: M

7.5-minute Topographic Map	Quadrangle Code	Margin Number	Ten Ten
ZION	4208747	14	06,05

Latitude: 422621N South: 0N North: 0N
Longitude: 0874808W East: 00W West: 00W
Township-Range: 046N012E Section: Meridian: 3P

Directions: Lake Michigan; 4 miles NE of Waukegan

Natural Division and Section: Watershed: 04060200
Specific Stream: Lake Michigan

-----STATUS-----

Survey Date: Date Last Observed: 1981-10-20
Year First Observed: Rank or Grade:
Rank Comments:
Data: fish collected

Contact: ()

-----DESCRIPTION-----

General Description:
Elevation: Size: 0

-----PROTECTION-----

Managed Areas	Contained
---------------	-----------

Management Comments:

Protection Comments:

-----COMMENTS-----

-----DOCUMENTATION-----

Data Sensitivity: (If "Y", be careful in releasing data)
Best Source: Page, Larry
Source Codes: PNDPAG01ILUS
ONDNHS03ILUS

Date Printed: MAR 11 1991

ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: PMCYP03360*011*IL
NAME: CAREX CRAWEI
CRAWE SEDGE

-----ELEMENT STATUS-----

Federal Status: State Status: LT
Global Rank: G5 State Rank: S2

-----LOCATORS-----

Site Name: ILLINOIS DUNES NORTH

Survey Site Name:

County: Lake Precision: S

7.5-minute Topographic Map	Quadrangle Code	Margin Number	Ten Ten
ZION	4208747	42	06,04

Latitude: 422704N South: N North: N
Longitude: 0874759W East: W West: W
Township-Range: 046N012E Section: 23 Meridian: 3P

Directions: Hosah Prairie, N of Zion Nuclear Power Plant

Natural Division and Section: 03B Watershed: 04040002
Specific Stream:

-----STATUS-----

Survey Date: Date Last Observed: 1988
Year First Observed: Rank or Grade:
Rank Comments:
Data: very abundant

Contact: ()

-----DESCRIPTION-----

General Description:
Elevation: Size:

-----PROTECTION-----

Managed Areas	Contained

Management Comments:

Protection Comments:

-----COMMENTS-----

-----DOCUMENTATION-----

Data Sensitivity: (If "Y", be careful in releasing data)
Best Source: Bowles, Marlin
Source Codes: PNDBOW01ILUS
U88BOW01ILUS

Date Printed: MAR 11 1991

ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: PMPOA08020*001*IL
NAME: AMMOPHILA BREVILIGULATA
AMERICAN BEACHGRASS

-----ELEMENT STATUS-----

Federal Status: State Status: LE
Global Rank: G5 State Rank: S1

-----LOCATORS-----

Site Name: ILLINOIS DUNES NORTH

Survey Site Name:

County: Lake

Precision: S

7.5-minute Topographic Map	Quadrangle Code	Margin Number	Ten Ten
ZION	4208747	42	06,04

Latitude: 422704N South: 0N North: 0N
Longitude: 0874759W East: 00W West: 00W
Township-Range: 046N012E Section: 23 Meridian: 3P

Directions: Hosah Park, N of Zion Nuclear Power Plant

Natural Division and Section: 03B Watershed: 04040002
Specific Stream: Lake Michigan

-----STATUS-----

Survey Date: Date Last Observed: 1990-06-25
Year First Observed: Rank or Grade:
Rank Comments:
Data:plants seen

Contact: ()

-----DESCRIPTION-----

General Description: foredune

Elevation: -1111 Size: 0

-----PROTECTION-----

Managed Areas	Contained
NORTH DUNES NATURE PRESERVE	N

Management Comments:

Protection Comments:

-----COMMENTS-----

-----DOCUMENTATION-----

Data Sensitivity: (If "Y", be careful in releasing data)
Best Source: Schwegman, John
Source Codes: PNDSCH01ILUS
DNDNAI01ILUS
UNDNLI01ILUS

Date Printed: MAR 11 1991

ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: PMSCH03040*005*IL
NAME: TRIGLOCHIN MARITIMUM
SEASIDE ARROW-GRASS

-----ELEMENT STATUS-----

Federal Status: State Status: LE
Global Rank: G5 State Rank: S2

-----LOCATORS-----

Site Name: ILLINOIS DUNES NORTH

Survey Site Name:

County: Lake

Precision: S

7.5-minute
Topographic Map

Quadrangle
Code

Margin
Number

Ten
Ten

ZION

4208747

42

06,04

Latitude: 422704N
Longitude: 0874759W
Township-Range: 046N012E

South: 0N

North: 0N

East: 00W

West: 00W

Section: 23

Meridian: 3P

Directions: Hosah Park, N of Zion Nuclear Power Plant

Natural Division and Section: 03B Watershed: 04040002
Specific Stream: Lake Michigan

-----STATUS-----

Survey Date: Date Last Observed: 1990
Year First Observed: Rank or Grade:
Rank Comments:
Data:plants found

Contact:

()

-----DESCRIPTION-----

General Description: panne

Elevation: -1111 Size: 0

-----PROTECTION-----

Managed Areas

Contained

Management Comments:

Protection Comments:

-----COMMENTS-----

-----DOCUMENTATION-----

Data Sensitivity: (If "Y", be careful in releasing data)

Best Source: McClain, Bill

Source Codes: PNDMCC01ILUS
DNDNAI01ILUS

Date Printed: MAR 11 1991

ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: PGCUP05070*002*IL
NAME: JUNIPERUS HORIZONTALIS
CREEPING JUNIPER

-----ELEMENT STATUS-----

Federal Status: State Status: LE
Global Rank: G5 State Rank: S1

-----LOCATORS-----

Site Name: ILLINOIS DUNES NORTH

Survey Site Name:

County: Lake Precision: S

7.5-minute Topographic Map	Quadrangle Code	Margin Number	Ten Ten
ZION	4208747	42	06,04

Latitude: 422704N South: 0N North: 0N
Longitude: 0874759W East: 00W West: 00W
Township-Range: 046N012E Section: 23 Meridian: 3P

Directions: Hosah Park, N of Zion Nuclear Power Plant

Natural Division and Section: 03B Watershed: 04040002
Specific Stream: Lake Michigan

-----STATUS-----

Survey Date: Date Last Observed: 1990
Year First Observed: Rank or Grade:
Rank Comments:
Data:plants found

Contact: ()

-----DESCRIPTION-----

General Description: foredune

Elevation: -1111 Size: 0

-----PROTECTION-----

Managed Areas	Contained

Management Comments:

Protection Comments:

-----COMMENTS-----

-----DOCUMENTATION-----

Data Sensitivity: (If "Y", be careful in releasing data)

Best Source: Illinois Natural Areas Inventory

Source Codes: DNDNAI01ILUS

Date Printed: MAR 11 1991

ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: PDBRA0F020*002*IL

NAME: CAKILE EDENTULA

AMERICAN SEA-ROCKET

-----ELEMENT STATUS-----

Federal Status:

State Status: LT

Global Rank: G5

State Rank: S1

-----LOCATORS-----

Site Name: ILLINOIS DUNES NORTH

Survey Site Name:

County: Lake

Precision: S

7.5-minute
Topographic Map

Quadrangle
Code

Margin
Number

Ten
Ten

ZION

4208747

42

06,04

Latitude: 422704N

South: 0N

North: 0N

Longitude: 087475W

East: 00W

West: 00W

Township-Range: 046N012E

Section: 23

Meridian: 3P

Directions: Hosah Park, N of Zion Nuclear Power Plant

Natural Division and Section: 03B

Watershed: 04040002

Specific Stream: Lake Michigan

-----STATUS-----

Survey Date:

Date Last Observed: 1990

Year First Observed:

Rank or Grade:

Rank Comments:

Data:plants found

Contact:

()

-----DESCRIPTION-----

General Description: beach

Elevation: -1111 Size: 0

-----PROTECTION-----

Managed Areas

Contained

Management Comments:

Protection Comments:

-----COMMENTS-----

-----DOCUMENTATION-----

Data Sensitivity: (If "Y", be careful in releasing data)

Best Source: Illinois Natural Areas Inventory

Source Codes: DNDNAI01ILUS

Date Printed: MAR 11 1991

ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: PDBRA0F020*001*IL

NAME: CAKILE EDENTULA

AMERICAN SEA-ROCKET

-----ELEMENT STATUS-----

Federal Status:

State Status: LT

Global Rank: G5

State Rank: S1

-----LOCATORS-----

Site Name: ILLINOIS BEACH

Survey Site Name:

County: Lake

Precision: S

7.5-minute
Topographic Map

Quadrangle
Code

Margin
Number

Ten
Ten

ZION

4208747

56

06,07

Latitude: 422510N

South: 0N

North: 0N

Longitude: 0874817W

East: 00W

West: 00W

Township-Range: 046N012E

Section: 35

Meridian: 3P

Directions: Illinois Beach State Park and Nature
Preserve, and along lake front extending N
and S

Natural Division and Section: 03B

Watershed: 04040002

Specific Stream: Lake Michigan

-----STATUS-----

Survey Date: Date Last Observed: 1988-07

Year First Observed: Rank or Grade:

Rank Comments:

Data: plants found along lake front, rare in 1976

Contact:

()

-----DESCRIPTION-----

General Description: beach, foredune

Elevation: -1111 Size: 0

-----PROTECTION-----

Managed Areas

Contained

ILLINOIS BEACH NATURE PRESERVE
ILLINOIS BEACH STATE PARK

N

Management Comments:

Protection Comments:

-----COMMENTS-----

-----DOCUMENTATION-----

Data Sensitivity: (If "Y", be careful in releasing data)

Best Source: Schwegman, John

Source Codes: PNDSCH01ILUS

PNDKAR01ILUS

DNDNAI01ILUS

UNDNLIO1ILUS

ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: PDBRA0F020*003*IL

NAME: CAKILE EDENTULA

AMERICAN SEA-ROCKET

-----ELEMENT STATUS-----

Federal Status:

State Status: LT

Global Rank: G5

State Rank: S1

-----LOCATORS-----

Site Name: ILLINOIS DUNES NORTH

Survey Site Name:

County: Lake

Precision: S

7.5-minute
Topographic Map

Quadrangle
Code

Margin
Number

Ten
Ten

ZION

4208747

75

06,03

Latitude: 422754N

South: 0N

North: 0N

Longitude: 0874756W

East: 00W

West: 00W

Township-Range: 046N012E

Section: 14

Meridian: 3P

ALSO SEC 11

Directions: Illinois Beach State Park, N of Zion Nuclear
Power Plant

Natural Division and Section: 03B

Watershed: 04040002

Specific Stream: Lake Michigan

-----STATUS-----

Survey Date:

Date Last Observed: 1990

Year First Observed:

Rank or Grade:

Rank Comments:

Data:plants found

Contact:

()

-----DESCRIPTION-----

General Description: beach

Elevation: -1111 Size: 0

-----PROTECTION-----

Managed Areas

Contained

NORTH DUNES NATURE PRESERVE

Y

ILLINOIS BEACH STATE PARK

Y

Management Comments:

Protection Comments:

-----COMMENTS-----

-----DOCUMENTATION-----

Data Sensitivity: (If "Y", be careful in releasing data)

Best Source: Illinois Natural Areas Inventory

Source Codes: DNDNAI01ILUS

Date Printed: MAR 11 1991

ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: PDEUP0D1Z0*002*IL
NAME: CHAMAESYCE POLYGONIFOLIA
SEASIDE SPURGE

-----ELEMENT STATUS-----

Federal Status: State Status: LE
Global Rank: G5? State Rank: S1

-----LOCATORS-----

Site Name: ILLINOIS DUNES NORTH

Survey Site Name:

County: Lake Precision: S

7.5-minute Topographic Map	Quadrangle Code	Margin Number	Ten Ten
ZION	4208747	42	06,04

Latitude: 422704N South: 0N North: 0N
Longitude: 0874759W East: 00W West: 00W
Township-Range: 046N012E Section: 23 Meridian: 3P

Directions: Hosah Park, N of Zion Nuclear Power Plant

Natural Division and Section: 03B Watershed: 04040002
Specific Stream: Lake Michigan

-----STATUS-----

Survey Date: Date Last Observed: 1976-
Year First Observed: Rank or Grade:
Rank Comments:
Data:plants seen

Contact: ()

-----DESCRIPTION-----

General Description: beach

Elevation: -1111 Size: 0

-----PROTECTION-----

Managed Areas	Contained

Management Comments:

Protection Comments:

-----COMMENTS-----

-----DOCUMENTATION-----

Data Sensitivity: (If "Y", be careful in releasing data)

Best Source: Illinois Natural Areas Inventory

Source Codes: DNDNAI01ILUS

Date Printed: MAR 11 1991

ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: PDEUP0D1Z0*003*IL
NAME: CHAMAESYCE POLYGONIFOLIA
SEASIDE SPURGE

-----ELEMENT STATUS-----

Federal Status: State Status: LE
Global Rank: G5? State Rank: S1

-----LOCATORS-----

Site Name: ILLINOIS DUNES NORTH

Survey Site Name:

County: Lake

Precision: S

7.5-minute Topographic Map	Quadrangle Code	Margin Number	Ten Ten
ZION	4208747	75	06,03

Latitude: 422754N South: 0N North: 0N
Longitude: 0874756W East: 00W West: 00W
Township-Range: 046N012E Section: 14 Meridian: 3P

ALSO SEC 11

Directions: Illinois Beach State Park, N of Zion Nuclear
Power Plant

Natural Division and Section: 03B Watershed: 04040002
Specific Stream: Lake Michigan

-----STATUS-----

Survey Date: Date Last Observed: 1976-

Year First Observed: Rank or Grade:

Rank Comments:

Data:plants found

Contact:

()

-----DESCRIPTION-----

General Description: beach

Elevation: -1111 Size: 0

-----PROTECTION-----

Managed Areas	Contained
NORTH DUNES NATURE PRESERVE	Y
ILLINOIS BEACH STATE PARK	Y

Management Comments:

Protection Comments:

-----COMMENTS-----

-----DOCUMENTATION-----

Data Sensitivity: (If "Y", be careful in releasing data)

Best Source: Illinois Natural Areas Inventory

Source Codes: DNDNAI01ILUS

Date Printed: MAR 11 1991

ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: PDCLU030Y0*002*IL
NAME: HYPERICUM KALMIANUM
KALM ST. JOHN'S-WORT

-----ELEMENT STATUS-----

Federal Status: State Status: LE
Global Rank: G4 State Rank: S1

-----LOCATORS-----

Site Name: ILLINOIS BEACH

Survey Site Name:

County: Lake

Precision: S

7.5-minute Topographic Map	Quadrangle Code	Margin Number	Ten Ten
ZION	4208747	56	06,07

Latitude: 422510N South: 0N North: 0N
Longitude: 0874817W East: 00W West: 00W
Township-Range: 046N012E Section: 35 Meridian: 3P

Directions: Illinois Beach State Park and Nature
Preserve

Natural Division and Section: 03B Watershed: 04040002
Specific Stream: Lake Michigan

-----STATUS-----

Survey Date: Date Last Observed: 1990

Year First Observed: Rank or Grade:

Rank Comments:

Data: plants seen throughout area, occasional in 1976

Contact: ()

-----DESCRIPTION-----

General Description: mesic sand prairie, sedge meadow, panne

Elevation: -1111 Size: 0

-----PROTECTION-----

Managed Areas	Contained
ILLINOIS BEACH NATURE PRESERVE	
ILLINOIS BEACH STATE PARK	N

Management Comments:

Protection Comments:

-----COMMENTS-----

-----DOCUMENTATION-----

Data Sensitivity: (If "Y", be careful in releasing data)

Best Source: Heidorn, Randy

Source Codes: PNDHEI01ILUS
DNDNAI01ILUS
UNDNLI01ILUS

Date Printed: MAR 11 1991

ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: PDCLU030Y0*003*IL
NAME: HYPERICUM KALMIANUM
KALM ST. JOHN'S-WORT

-----ELEMENT STATUS-----

Federal Status: State Status: LE
Global Rank: G4 State Rank: S1

-----LOCATORS-----

Site Name: ILLINOIS DUNES NORTH

Survey Site Name:

County: Lake

Precision: M

7.5-minute Topographic Map	Quadrangle Code	Margin Number	Ten Ten
ZION	4208747	72	06,04

Latitude: 422718N South: 0N North: 0N
Longitude: 0874803W East: 00W West: 00W
Township-Range: 046N012E Section: 23 Meridian: 3p

Directions: Illinois Beach State Park, N of Zion Nuclear
Power Plant

Natural Division and Section: 03B Watershed: 04040002
Specific Stream: Lake Michigan

-----STATUS-----

Survey Date: Date Last Observed: 1990

Year First Observed: Rank or Grade:

Rank Comments:

Data:plants found in the natural area

Contact: ()

-----DESCRIPTION-----

General Description: panne, mesic sand prairie

Elevation: -1111 Size: 0

-----PROTECTION-----

Managed Areas	Contained
NORTH DUNES NATURE PRESERVE	Y
ILLINOIS BEACH STATE PARK	Y

Management Comments:

Protection Comments:

-----COMMENTS-----

-----DOCUMENTATION-----

Data Sensitivity: (If "Y", be careful in releasing data)
Best Source: Illinois Natural Areas Inventory
Source Codes: DNDNAI01ILUS

Date Printed: MAR 11 1991

ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: PDRHA040K0*003*IL
NAME: CEANOTHUS HERBACEUS
PRAIRIE REDROOT

-----ELEMENT STATUS-----

Federal Status: State Status: LE
Global Rank: G5 State Rank: S1

-----LOCATORS-----

Site Name: ILLINOIS BEACH

Survey Site Name:

County: Lake

Precision: S

7.5-minute Topographic Map	Quadrangle Code	Margin Number	Ten Ten
ZION	4208747	58	06,07

Latitude: 422456N South: 0N North: 0N
Longitude: 0874815W East: 00W West: 00W

Township-Range: 046N012E Section: 35 Meridian: 3P
ALSO SEC 2,3,10,26,27,34

Directions: Illinois Beach State Park and Nature
Preserve

Natural Division and Section: 03B Watershed: 04040002
Specific Stream: Lake Michigan

-----STATUS-----

Survey Date: Date Last Observed: 1990

Year First Observed: Rank or Grade:

Rank Comments:

Data:plants seen, rare in 1976

Contact: ()

-----DESCRIPTION-----

General Description: dry sand savanna, dry-mesic sand prairie

Elevation: -1111 Size: 0

-----PROTECTION-----

Managed Areas	Contained
ILLINOIS BEACH NATURE PRESERVE ILLINOIS BEACH STATE PARK	N

Management Comments:

Protection Comments:

-----COMMENTS-----

-----DOCUMENTATION-----

Data Sensitivity: (If "Y", be careful in releasing data)

Best Source: Schwegman, John

Source Codes: PNDSCH01ILUS

DNDNAI01ILUS

UNDNL01ILUS

Date Printed: MAR 11 1991

ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: PDSAL02350*001*IL
NAME: SALIX SYRTICOLA
DUNE WILLOW

-----ELEMENT STATUS-----

Federal Status: State Status: LE
Global Rank: G4Q State Rank: S1

-----LOCATORS-----

Site Name: ILLINOIS DUNES NORTH

Survey Site Name:

County: Lake Precision: M

7.5-minute Topographic Map	Quadrangle Code	Margin Number	Ten Ten
ZION	4208747	63	06,05

Latitude: 422658N South: 0N North: 0N
Longitude: 0874800W East: 00W West: 00W
Township-Range: 046N012E Section: 23 Meridian: 3P

Directions: Illinois Beach State Park and nearby
lakefront area

Natural Division and Section: 03B Watershed: 04040002
Specific Stream:

-----STATUS-----

Survey Date: Date Last Observed: 1968-

Year First Observed: Rank or Grade:

Rank Comments:

Data:plants have been found throughout area

Contact: ()

-----DESCRIPTION-----

General Description: foredune, beach

Elevation: -1111 Size: 0

-----PROTECTION-----

Managed Areas	Contained
NORTH DUNES NATURE PRESERVE	Y
ILLINOIS BEACH STATE PARK	Y

Management Comments:

Protection Comments:

-----COMMENTS-----

-----DOCUMENTATION-----

Data Sensitivity: (If "Y", be careful in releasing data)

Best Source: Natural Land Institute Registry Cards

Source Codes: UNDNL101ILUS
DNDNAI01ILUS

Date Printed: MAR 11 1991

ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: PDSAL02350*002*IL
NAME: SALIX SYRTICOLA
DUNE WILLOW

-----ELEMENT STATUS-----

Federal Status: State Status: LE
Global Rank: G4Q State Rank: S1

-----LOCATORS-----

Site Name: ILLINOIS BEACH

Survey Site Name:

County: Lake

Precision: M

7.5-minute Topographic Map	Quadrangle Code	Margin Number	Ten Ten
ZION	4208747	64	06,08

Latitude: 422412N South: 0N North: 0N
Longitude: 0874814W East: 00W West: 00W

Township-Range: 045N012E Section: 2 Meridian: 3P

ALSO SEC 3

Directions: Illinois Beach State Park and Nature
Preserve

Natural Division and Section: 03B Watershed: 04040002
Specific Stream: Lake Michigan

-----STATUS-----

Survey Date: Date Last Observed: 1988-08-02

Year First Observed: Rank or Grade:

Rank Comments:

Data: 56 clumps found along foredunes

Contact:

()

-----DESCRIPTION-----

General Description: foredune beach

Elevation: -1111 Size: 0

-----PROTECTION-----

Managed Areas

Contained

ILLINOIS BEACH NATURE PRESERVE

N

ILLINOIS BEACH STATE PARK

Y

Management Comments:

Protection Comments:

-----COMMENTS-----

-----DOCUMENTATION-----

Data Sensitivity: (If "Y", be careful in releasing data)

Best Source: Illinois Natural Areas Inventory

Source Codes: PNDBOW01ILUS

DNDNAI01ILUS

UNDNL101ILUS

UNDVSN01ILUS

ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: PMSCH03050*007*IL
NAME: TRIGLOCHIN PALUSTRE
MARSH ARROW-GRASS

-----ELEMENT STATUS-----

Federal Status: State Status: LE
Global Rank: G5 State Rank: S2

-----LOCATORS-----

Site Name: ILLINOIS DUNES NORTH

Survey Site Name:

County: Lake

Precision: M

7.5-minute Topographic Map	Quadrangle Code	Margin Number	Ten Ten
ZION	4208747	72	06,04

Latitude: 422718N South: 0N North: 0N
Longitude: 0874803W East: 00W West: 00W
Township-Range: 046N012E Section: 23 Meridian: 3P

Directions: Illinois Beach State Park, N of Zion Nuclear
Power Plant

Natural Division and Section: 03B Watershed: 04040002
Specific Stream: Lake Michigan

-----STATUS-----

Survey Date: Date Last Observed: 1990

Year First Observed: Rank or Grade:

Rank Comments:

Data:plants found

Contact:

()

-----DESCRIPTION-----

General Description: panne

Elevation: -1111 Size: 0

-----PROTECTION-----

Managed Areas	Contained
NORTH DUNES NATURE PRESERVE	Y
ILLINOIS BEACH STATE PARK	Y

Management Comments:

Protection Comments:

-----COMMENTS-----

-----DOCUMENTATION-----

Data Sensitivity: (If "Y", be careful in releasing data)

Best Source: Illinois Natural Areas Inventory

Source Codes: DNDNAI01ILUS

Date Printed: MAR 11 1991

ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: PMLIL1Y030*005*IL
NAME: TOFIELDIA GLUTINOSA
STICKY FALSE-ASPHODEL

-----ELEMENT STATUS-----

Federal Status: State Status: LT
Global Rank: G5 State Rank: S2

-----LOCATORS-----

Site Name: ILLINOIS DUNES NORTH

Survey Site Name:

County: Lake Precision: M

7.5-minute Topographic Map	Quadrangle Code	Margin Number	Ten Ten
ZION	4208747	72	06,04

Latitude: 422718N South: 0N North: 0N
Longitude: 0874803W East: 00W West: 00W
Township-Range: 046N012E Section: 23 Meridian: 3P

Directions: Illinois Beach State Park, N of Zion Nuclear
Power Plant

Natural Division and Section: 03B Watershed: 04040002
Specific Stream: Lake Michigan

-----STATUS-----

Survey Date: Date Last Observed: 1976-

Year First Observed: Rank or Grade:

Rank Comments:

Data:plants found

Contact:

()

-----DESCRIPTION-----

General Description: panne

Elevation: -1111 Size: 0

-----PROTECTION-----

Managed Areas	Contained
NORTH DUNES NATURE PRESERVE	Y
ILLINOIS BEACH STATE PARK	Y

Management Comments:

Protection Comments:

-----COMMENTS-----

-----DOCUMENTATION-----

Data Sensitivity: (If "Y", be careful in releasing data)

Best Source: Illinois Natural Areas Inventory

Source Codes: DNDNAI01ILUS

Date Printed: MAR 11 1991

ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: AFCJC02030*001*IL
NAME: CATOSTOMUS CATOSTOMUS
LONGNOSE SUCKER

-----ELEMENT STATUS-----

Federal Status: State Status: LT
Global Rank: G5 State Rank: S3

-----LOCATORS-----

Site Name:
Survey Site Name: LAKE MICHIGAN
County: Lake

Precision: M

7.5-minute Topographic Map	Quadrangle Code	Margin Number	Ten Ten
WAUKEGAN	4208737	1	04,08

Latitude: 421643N South: 0N North: 0N
Longitude: 0874941W East: 00W West: 00W
Township-Range: 044N012E Section: 21 Meridian: 3P
NE4

Directions: Lake Michigan at Lake Bluff

Natural Division and Section: Watershed: 04060200
Specific Stream:

-----STATUS-----
Survey Date: Date Last Observed: 1981-06-12
Year First Observed: Rank or Grade:
Rank Comments:
Data: 1 fish collected

Contact: ()

-----DESCRIPTION-----

General Description:
Elevation: Size: 0

-----PROTECTION-----
Managed Areas Contained

Management Comments:

Protection Comments:

-----COMMENTS-----

-----DOCUMENTATION-----
Data Sensitivity: (If "Y", be careful in releasing data)
Best Source: Illinois State Natural History Survey Fish Collection
Source Codes: ONDNHS03ILUS

Date Printed: MAR 11 1991

ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: PGCUP05030*007*IL
NAME: JUNIPERUS COMMUNIS
GROUND JUNIPER

-----ELEMENT STATUS-----

Federal Status: State Status: LT
Global Rank: G5 State Rank: S2

-----LOCATORS-----

Site Name: BLAIR WOODS

Survey Site Name:

County: Lake

Precision: S

7.5-minute Topographic Map	Quadrangle Code	Margin Number	Ten Ten
WAUKEGAN	4208737	4	04,07

Latitude: 421725N South: North:
Longitude: 0874958W East: West:
Township-Range: 044N012E Section: 16 Meridian: 3P
SE4SW4NE4

Directions: Blair Woods, N of Lake Bluff

Natural Division and Section: 3A Watershed: 04040002
Specific Stream:

-----STATUS-----

Survey Date: Date Last Observed: 1990-06-26
Year First Observed: 1990 Rank or Grade:
Rank Comments:
Data: 1 shrub

Contact: ()

-----DESCRIPTION-----

General Description: bluff

Elevation: Size:

-----PROTECTION-----

Managed Areas	Contained

Management Comments:

Protection Comments:

-----COMMENTS-----

-----DOCUMENTATION-----

Data Sensitivity: (If "Y", be careful in releasing data)
Best Source: Schwegman, John
Source Codes: PNDSCH01ILUS

Date Printed: MAR 11 1991

ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: PDELG03020*005*IL
NAME: SHEPHERDIA CANADENSIS
CANADA BUFFALOERRY

-----ELEMENT STATUS-----

Federal Status: State Status: LE
Global Rank: G5 State Rank: S1

-----LOCATORS-----

Site Name: BLODGETT BLUFF

Survey Site Name:

County: Lake

Precision: S

7.5-minute
Topographic Map

Quadrangle
Code

Margin
Number

Ten
Ten

WAUKEGAN

4208737

8

04,08

Latitude: 421705N

South:

North:

Longitude: 0874955W

East:

West:

Township-Range: 044N012E

Section: 16

Meridian: 3P

SW4SE4SE4

Directions: Lakeshore bluff slightly N of Blodgett
Avenue in Lake Bluff

Natural Division and Section: 3A

Watershed: 04040002

Specific Stream:

-----STATUS-----

Survey Date:

Date Last Observed: 1990-06-26

Year First Observed: 1990

Rank or Grade:

Rank Comments:

Data: 2 clones

Contact:

()

-----DESCRIPTION-----

General Description: bluff

Elevation: Size:

-----PROTECTION-----

Managed Areas

Contained

Management Comments:

Protection Comments:

-----COMMENTS-----

-----DOCUMENTATION-----

Data Sensitivity: (If "Y", be careful in releasing data)

Best Source: Schwegman, John

Source Codes: PNDSCH01ILLUS

Date Printed: MAR 11 1991

ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: PGCUP06010*009*IL
NAME: THUJA OCCIDENTALIS
NORTHERN WHITE CEDAR

-----ELEMENT STATUS-----

Federal Status: State Status: LT
Global Rank: G5 State Rank: S2

-----LOCATORS-----

Site Name: LAKE BLUFF WOODS

Survey Site Name:

County: Lake

Precision: S

7.5-minute Topographic Map	Quadrangle Code	Margin Number	Ten Ten
WAUKEGAN	4208737	10	04,09

Latitude: 421613N South: N North: N
Longitude: 0874943W East: 0W West: 0W
Township-Range: 044N012E Section: 21 Meridian: 3P
SE4SE4SE4 + NE4NE4NE4 SEC 28 + NW4SW4NW4

SEC 27

Directions: Lake Bluff Woods and south, adjacent to Lake
Bluff and Lake Michigan

Natural Division and Section: 03A Watershed: 04040002
Specific Stream:

-----STATUS-----

Survey Date: Date Last Observed: 1990-06-26

Year First Observed: Rank or Grade:

Rank Comments:

Data:Occasional(1976); found at 3 locations

Contact: ()

-----DESCRIPTION-----

General Description: Ravine mouth, lakeshore bluff

Elevation: Size:

-----PROTECTION-----

Managed Areas	Contained

Management Comments:

Protection Comments:

-----COMMENTS-----

-----DOCUMENTATION-----

Data Sensitivity: (If "Y", be careful in releasing data)

Best Source: Schwegman, John

Source Codes: PNDSCH01ILUS

DNDNAI01ILUS

UNDNL01ILUS

Date Printed: MAR 11 1991

ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: PDBRA0F020*006*IL

NAME: CAKILE EDENTULA

AMERICAN SEA-ROCKET

-----ELEMENT STATUS-----

Federal Status:

State Status: LT

Global Rank: G5

State Rank: S1

-----LOCATORS-----

Site Name:

Survey Site Name:

County: Lake

Precision: G

7.5-minute
Topographic Map

Quadrangle
Code

Margin
Number

Ten
Ten

WAUKEGAN

4208737

12

04,07

Latitude: 421748N

South:

North:

Longitude: 0875000W

East:

West:

Township-Range: 044N012E

Section: 16

Meridian: 3P

Directions: Lake Michigan beach from Waukegan to Lake
Forest

Natural Division and Section: 3A

Watershed: 04040002

Specific Stream:

-----STATUS-----

Survey Date:

Date Last Observed: 1990-06-26

Year First Observed: 1990

Rank or Grade:

Rank Comments:

Data: locally abundant in suitable habitat at several locations
along beach

Contact:

()

-----DESCRIPTION-----

General Description: beach

Elevation: Size:

-----PROTECTION-----

Managed Areas

Contained

Management Comments:

Protection Comments:

-----COMMENTS-----

-----DOCUMENTATION-----

Data Sensitivity: (If "Y", be careful in releasing data)

Best Source: Schwegman, John

Source Codes: PNDSCH01ILUS

Date Printed: MAR 11 1991

ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: PDROS050C0*002*IL
NAME: AMELANCHIER SANGUINEA
SHADBUSH

-----ELEMENT STATUS-----

Federal Status: State Status: LE
Global Rank: G5 State Rank: S1

-----LOCATORS-----

Site Name:
Survey Site Name:
County: Lake

Precision: M

7.5-minute Topographic Map	Quadrangle Code	Margin Number	Ten Ten
HIGHLAND PARK	4208727	2	08,09

Latitude: 420922N South: N North: N
Longitude: 0874542W East: W West: W
Township-Range: 043N013E Section: 31 Meridian: 3P
SE4

Directions: Lake bluff facing Lake Michigan

Natural Division and Section: Watershed: 04040002
Specific Stream: 03A

-----STATUS-----

Survey Date: Date Last Observed: 1976-06-12
Year First Observed: Rank or Grade:
Rank Comments:
Data: plant collected, needs verification of site and voucher

Contact: ()

-----DESCRIPTION-----
General Description: lake bluff

Elevation: Size:

-----PROTECTION-----

Managed Areas	Contained

Management Comments:

Protection Comments:

-----COMMENTS-----

-----DOCUMENTATION-----

Data Sensitivity: (If "Y", be careful in releasing data)
Best Source: Natural Land Institute Registry Cards
Source Codes: UNDNLI01ILUS

Date Printed: MAR 11 1991

ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: PGCUP06010*012*IL
NAME: THUJA OCCIDENTALIS
NORTHERN WHITE CEDAR

-----ELEMENT STATUS-----

Federal Status: State Status: LT
Global Rank: G5 State Rank: S2

-----LOCATORS-----

Site Name:

Survey Site Name:

County: Cook

Precision: S

7.5-minute Topographic Map	Quadrangle Code	Margin Number	Ten Ten
HIGHLAND PARK	42087275	5	10,09

Latitude: 420828N South: North:
Longitude: 0874503W East: West:
Township-Range: 042N013E Section: 06 Meridian: 3P
NE4SE4SE4

Directions: Lakeshore bluff in Glencoe N of aqueduct

Natural Division and Section: 3C Watershed: 04040002
Specific Stream:

-----STATUS-----

Survey Date: Date Last Observed: 1990-06-26
Year First Observed: 1990 Rank or Grade:
Rank Comments:
Data:trees found

Contact: ()

-----DESCRIPTION-----

General Description: bluff

Elevation: Size:

-----PROTECTION-----

Managed Areas	Contained

Management Comments:

Protection Comments:

-----COMMENTS-----

-----DOCUMENTATION-----

Data Sensitivity: (If "Y", be careful in releasing data)
Best Source: Schwegman, John
Source Codes: PNDSCH01ILUS

Date Printed: MAR 11 1991

ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: PGCUP06010*013*IL
NAME: THUJA OCCIDENTALIS
NORTHERN WHITE CEDAR

-----ELEMENT STATUS-----

Federal Status: State Status: LT
Global Rank: G5 State Rank: S2

-----LOCATORS-----

Site Name:

Survey Site Name:

County: Lake

Precision: S

7.5-minute Topographic Map	Quadrangle Code	Margin Number	Ten Ten
HIGHLAND PARK	4208727	9	07,05

Latitude: 421115N South: North:
Longitude: 0874712W East: West:
Township-Range: 043N012E Section: 24 Meridian: 3P
NW4NW4SW4 + NW4SW4NE4 SEC 25
Directions: Lakeshore bluff in Highland Park S of
waterworks

Natural Division and Section: 3A Watershed: 04040002
Specific Stream:

-----STATUS-----

Survey Date: Date Last Observed: 1990-06-26
Year First Observed: 1990 Rank or Grade:

Rank Comments:

Data:trees found in 2 locations

Contact:

()

-----DESCRIPTION-----

General Description: bluff

Elevation: Size:

-----PROTECTION-----

Managed Areas	Contained

Management Comments:

Protection Comments:

-----COMMENTS-----

-----DOCUMENTATION-----

Data Sensitivity: (If "Y", be careful in releasing data)
Best Source: Schwegman, John
Source Codes: PNDSCH01ILUS

Date Printed: MAR 11 1991

ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: PGCUP06010*014*IL
NAME: THUJA OCCIDENTALIS
NORTHERN WHITE CEDAR

-----ELEMENT STATUS-----

Federal Status: State Status: LT
Global Rank: G5 State Rank: S2

-----LOCATORS-----

Site Name:

Survey Site Name:

County: Lake

Precision: S

7.5-minute Topographic Map	Quadrangle Code	Margin Number	Ten Ten
HIGHLAND PARK	4208727	15	05,01

Latitude: 421432N South: North:
Longitude: 0874858W East: West:
Township-Range: 044N012E Section: 34 Meridian: 3P
NW4SW4SE4 + NW4NE4SE4 SEC 3 043N012E
Directions: Lakeshore bluff SE of Lake Forest

Natural Division and Section: 3A Watershed: 04040002
Specific Stream:

-----STATUS-----

Survey Date: Date Last Observed: 1990-06-26
Year First Observed: 1990 Rank or Grade:
Rank Comments:
Data:trees found in 2 locations

Contact: ()

-----DESCRIPTION-----
General Description: bluff

Elevation: Size:

-----PROTECTION-----

Managed Areas	Contained

Management Comments:

Protection Comments:

-----COMMENTS-----

-----DOCUMENTATION-----

Data Sensitivity: (If "Y", be careful in releasing data)
Best Source: Schwegman, John
Source Codes: PNDSCH01ILUS

Date Printed: MAR 11 1991

ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: PGCUP06010*007*IL
NAME: THUJA OCCIDENTALIS
NORTHERN WHITE CEDAR

-----ELEMENT STATUS-----

Federal Status: State Status: LT
Global Rank: G5 State Rank: S2

-----LOCATORS-----

Site Name: FORT SHERIDAN BLUFF

Survey Site Name:

County: Lake

Precision: S

7.5-minute Topographic Map	Quadrangle Code	Margin Number	Ten Ten
HIGHLAND PARK	4208727	19	06,09

Latitude: 421242N South: 0N North: 0N
Longitude: 0874808W East: 00W West: 00W
Township-Range: 043N012E Section: 11 Meridian: 3P

Directions: Fort Sheridan Bluff, adjacent to Lake Michigan

Natural Division and Section: 03A Watershed: 04040002
Specific Stream: Lake Michigan

-----STATUS-----

Survey Date: Date Last Observed: 1990-06
Year First Observed: Rank or Grade:

Rank Comments:

Data:rare(1978)

Contact: ()

-----DESCRIPTION-----

General Description: eroding bluff

Elevation: -1111 Size: 0

-----PROTECTION-----

Managed Areas	Contained

Management Comments:

Protection Comments:

-----COMMENTS-----

-----DOCUMENTATION-----

Data Sensitivity: (If "Y", be careful in releasing data)

Best Source: Heidorn, Randy

Source Codes: PNDHEI01ILUS

DNDNAI01ILUS

UNDNLI01ILUS

Date Printed: MAR 11 1991

ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: PGCUP06010*008*IL
NAME: THUJA OCCIDENTALIS
NORTHERN WHITE CEDAR

-----ELEMENT STATUS-----

Federal Status: State Status: LT
Global Rank: G5 State Rank: S2

-----LOCATORS-----

Site Name: RAVINIA BLUFF

Survey Site Name:

County: Lake

Precision: S

7.5-minute Topographic Map	Quadrangle Code	Margin Number	Ten Ten
HIGHLAND PARK	4208727	20	10,08

Latitude: 420911N South: 0N North: 0N
Longitude: 0874528W East: 00W West: 00W
Township-Range: 043N013E Section: 31 Meridian: 3P

Directions: Ravinia Bluff, adjacent to Lake Michigan

Natural Division and Section: 03A Watershed: 04040002
Specific Stream:

-----STATUS-----
Survey Date: Date Last Observed: 1990-06-26
Year First Observed: Rank or Grade:
Rank Comments:
Data:common(1976)

Contact: ()

-----DESCRIPTION-----
General Description: eroding bluff

Elevation: -1111 Size: 0

-----PROTECTION-----
Managed Areas Contained

Management Comments:

Protection Comments:

-----COMMENTS-----

-----DOCUMENTATION-----
Data Sensitivity: (If "Y", be careful in releasing data)
Best Source: Schwegman, John
Source Codes: PNDSCH01ILUS
DNDNAI01ILUS
UNDNL01ILUS

Date Printed: MAR 11 1991

ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: PDELG03020*004*IL
NAME: SHEPHERDIA CANADENSIS
CANADA BUFFALOERRY

-----ELEMENT STATUS-----

Federal Status: State Status: LE
Global Rank: G5 State Rank: S1

-----LOCATORS-----

Site Name: FORT SHERIDAN SITE

Survey Site Name:

County: Lake

Precision: S

7.5-minute
Topographic Map

Quadrangle
Code

Margin
Number

Ten
Ten

HIGHLAND PARK

4208727

10

06,03

Latitude: 421318N
Longitude: 0874827W
Township-Range: 043N012E
SW4NW4NW4

South: North:
East: West:
Section: 11 Meridian: 3P

Directions: Bluff above a Fort Sheridan aquaduct

Natural Division and Section: 3A Watershed: 04040002
Specific Stream:

-----STATUS-----

Survey Date: Date Last Observed: 1990-06-26
Year First Observed: 1990 Rank or Grade:
Rank Comments:
Data: 10 plants

Contact:

()

-----DESCRIPTION-----

General Description: bluff

Elevation: Size:

-----PROTECTION-----

Managed Areas

Contained

Management Comments:

Protection Comments:

-----COMMENTS-----

-----DOCUMENTATION-----

Data Sensitivity: (If "Y", be careful in releasing data)
Best Source: Schwegman, John
Source Codes: PNDSCH01ILUS

Date Printed: MAR 11 1991

ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: PDELG03020*001*IL
NAME: SHEPHERDIA CANADENSIS
CANADA BUFFALOERRY

-----ELEMENT STATUS-----

Federal Status: State Status: LE
Global Rank: G5 State Rank: S1

-----LOCATORS-----

Site Name: MCCORMICK NATURE PRESERVE

Survey Site Name:

County: Lake Precision: S

7.5-minute Topographic Map	Quadrangle Code	Margin Number	Ten Ten
HIGHLAND PARK	4208727	14	05,02

Latitude: 421340N South: 0N North: 0N
Longitude: 0874842W East: 00W West: 00W
Township-Range: 043N012E Section: 03 Meridian: 3P

Directions: McCormick Nature Preserve; N of Ft. Sheridan

Natural Division and Section: 03A Watershed: 04040002
Specific Stream: Lake Michigan

-----STATUS-----

Survey Date: Date Last Observed: 1990-06
Year First Observed: Rank or Grade:
Rank Comments:
Data:rare(1976)

Contact: ()

-----DESCRIPTION-----

General Description: bluff

Elevation: -1111 Size: 0

-----PROTECTION-----

Managed Areas	Contained

Management Comments:

Protection Comments: PUBLIC LAND, INFORMALLY RECOGNIZED AS A NATURAL AREA

-----COMMENTS-----

not relocated in 1988

-----DOCUMENTATION-----

Data Sensitivity: (If "Y", be careful in releasing data)

Best Source: Illinois Natural Areas Inventory

Source Codes: DNDNAI01ILUS
UNDVSN01ILUS

Date Printed: MAR 11 1991

ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: PDELG03020*002*IL
NAME: SHEPHERDIA CANADENSIS
CANADA BUFFALOERRY

-----ELEMENT STATUS-----

Federal Status: State Status: LE
Global Rank: G5 State Rank: S1

-----LOCATORS-----

Site Name: FORT SHERIDAN BLUFF

Survey Site Name:

County: Lake Precision: S

7.5-minute Topographic Map	Quadrangle Code	Margin Number	Ten Ten
HIGHLAND PARK	4208727	19	06,09

Latitude: 421242N South: 0N North: 0N
Longitude: 0874802W East: 00W West: 00W
Township-Range: 043N012E Section: 11 Meridian: 3P

Directions: Fort Sheridan Bluff, adjacent to Lake Michigan

Natural Division and Section: 03A Watershed: 04040002
Specific Stream:

-----STATUS-----

Survey Date: Date Last Observed: 1990-06-26

Year First Observed: Rank or Grade:

Rank Comments:

Data:common, approx. 100(1978)

Contact: ()

-----DESCRIPTION-----

General Description: eroding bluff

Elevation: -1111 Size: 0

-----PROTECTION-----

Managed Areas	Contained

Management Comments:

Protection Comments:

-----COMMENTS-----

-----DOCUMENTATION-----

Data Sensitivity: (If "Y", be careful in releasing data)

Best Source: Schwegman, John

Source Codes: PNDSCH01ILUS

DNDNAI01ILUS

UNDNL01ILUS

Date Printed: MAR 11 1991

ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: PDELG03020*003*IL
NAME: SHEPHERDIA CANADENSIS
CANADA BUFFALOERRY

-----ELEMENT STATUS-----

Federal Status: State Status: LE
Global Rank: G5 State Rank: S1

-----LOCATORS-----

Site Name: RAVINIA BLUFF

Survey Site Name:

County: Lake Precision: S

7.5-minute Topographic Map	Quadrangle Code	Margin Number	Ten Ten
HIGHLAND PARK	4208727	20	10,08

Latitude: 420911N South: 0N North: 0N
Longitude: 0874528W East: 00W West: 00W
Township-Range: 043N013E Section: 31 Meridian: 3P

Directions: Ravinia Bluff, adjacent to Lake Michigan

Natural Division and Section: 03A Watershed: 04040002
Specific Stream: Lake Michigan

-----STATUS-----

Survey Date: Date Last Observed: 1990
Year First Observed: Rank or Grade:
Rank Comments:
Data:rare(1976)

Contact: ()

-----DESCRIPTION-----

General Description: eroding bluff

Elevation: -1111 Size: 0

-----PROTECTION-----

Managed Areas	Contained

Management Comments:

Protection Comments:

-----COMMENTS-----

-----DOCUMENTATION-----

Data Sensitivity: (If "Y", be careful in releasing data)

Best Source: Illinois Natural Areas Inventory

Source Codes: DNDNAI01ILUS

Date Printed: MAR 11 1991

ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: PGCUP05030*003*IL
NAME: JUNIPERUS COMMUNIS
GROUND JUNIPER

-----ELEMENT STATUS-----

Federal Status: State Status: LT
Global Rank: G5 State Rank: S2

-----LOCATORS-----

Site Name: FORT SHERIDAN BLUFF

Survey Site Name:

County: Lake Precision: S

7.5-minute Topographic Map	Quadrangle Code	Margin Number	Ten Ten
HIGHLAND PARK	4208727	19	06,09

Latitude: 421242N South: 0N North: 0N
Longitude: 0874808W East: 00W West: 00W
Township-Range: 043N012E Section: 11 Meridian: 3P

Directions: Fort Sheridan Bluff, adjacent to Lake Michigan

Natural Division and Section: 03A Watershed: 04040002
Specific Stream:

-----STATUS-----

Survey Date: Date Last Observed: 1990-06-26
Year First Observed: Rank or Grade:

Rank Comments:

Data:common(1978)

Contact: ()

-----DESCRIPTION-----

General Description: eroding bluff

Elevation: -1111 Size: 0

-----PROTECTION-----

Managed Areas	Contained

Management Comments:

Protection Comments:

-----COMMENTS-----

-----DOCUMENTATION-----

Data Sensitivity: (If "Y", be careful in releasing data)

Best Source: Schwegman, John

Source Codes: PNDSCH01ILUS

DNDNAI01ILUS

UNDNL01ILUS

Date Printed: MAR 11 1991

ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: PGCUP05030*002*IL
NAME: JUNIPERUS COMMUNIS
GROUND JUNIPER

-----ELEMENT STATUS-----

Federal Status: State Status: LT
Global Rank: G5 State Rank: S2

-----LOCATORS-----

Site Name: MCCORMICK NATURE PRESERVE

Survey Site Name:

County: Lake Precision: S

7.5-minute Topographic Map	Quadrangle Code	Margin Number	Ten Ten
HIGHLAND PARK	4208727	14	05,02

Latitude: 421340N South: 0N North: 0N
Longitude: 0874842W East: 00W West: 00W
Township-Range: 043N012E Section: 03 Meridian: 3P

Directions: McCormick Nature Preserve; N of Ft. Sheridan

Natural Division and Section: 03A Watershed: 04040002
Specific Stream: Lake Michigan

-----STATUS-----

Survey Date: Date Last Observed: 1990
Year First Observed: Rank or Grade:
Rank Comments:
Data:common

Contact: ()

-----DESCRIPTION-----

General Description: bluff

Elevation: -1111 Size: 0

-----PROTECTION-----

Managed Areas	Contained
---------------	-----------

Management Comments:

Protection Comments: PUBLIC LAND, INFORMALLY RECOGNIZED AS A NATURAL AREA

-----COMMENTS-----

-----DOCUMENTATION-----

Data Sensitivity: (If "Y", be careful in releasing data)
Best Source: Illinois Natural Areas Inventory
Source Codes: DNDNAI01ILUS

Date Printed: MAR 11 1991

ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: PGCUP05030*004*IL
NAME: JUNIPERUS COMMUNIS
GROUND JUNIPER

-----ELEMENT STATUS-----

Federal Status: State Status: LT
Global Rank: G5 State Rank: S2

-----LOCATORS-----

Site Name: RAVINIA BLUFF

Survey Site Name:

County: Lake

Precision: S

7.5-minute Topographic Map	Quadrangle Code	Margin Number	Ten Ten
HIGHLAND PARK	4208727	20	10,08

Latitude: 420911N South: 0N North: 0N
Longitude: 0874528W East: 00W West: 00W
Township-Range: 043N013E Section: 31 Meridian: 3P

Directions: Ravinia Bluff, adjacent to Lake Michigan

Natural Division and Section: 03A Watershed: 04040002
Specific Stream: Lake Michigan

-----STATUS-----

Survey Date: Date Last Observed: 1990-06
Year First Observed: Rank or Grade:
Rank Comments:
Data:occasional to common(1976)

Contact: ()

-----DESCRIPTION-----

General Description: eroding bluff

Elevation: -1111 Size: 0

-----PROTECTION-----

Managed Areas	Contained

Management Comments:

Protection Comments:

-----COMMENTS-----

-----DOCUMENTATION-----

Data Sensitivity: (If "Y", be careful in releasing data)

Best Source: Illinois Natural Areas Inventory

Source Codes: DNDNAI01ILUS
UNDNL01ILUS

Date Printed: MAR 11 1991

ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: PDVIO040E0*009*IL

NAME: VIOLA CONSPERSA

AMERICAN BOG VIOLET

-----ELEMENT STATUS-----

Federal Status:

State Status: LT

Global Rank: G5

State Rank: S2

-----LOCATORS-----

Site Name: FORT SHERIDAN BLUFF

Survey Site Name:

County: Lake

Precision: S

7.5-minute
Topographic Map

Quadrangle
Code

Margin
Number

Ten
Ten

HIGHLAND PARK

4208727

19

06,09

Latitude: 421242N

South: 0N

North: 0N

Longitude: 0874808W

East: 00W

West: 00W

Township-Range: 043N012E

Section: 11

Meridian: 3P

Directions: Fort Sheridan Bluff, adjacent to Lake
Michigan

Natural Division and Section: 03A

Watershed: 04040002

Specific Stream: Lake Michigan

-----STATUS-----

Survey Date:

Date Last Observed: 1990-06

Year First Observed:

Rank or Grade:

Rank Comments:

Data:common(1976)

Contact:

()

-----DESCRIPTION-----

General Description: ravine, eroding bluff

Elevation: -1111 Size: 0

-----PROTECTION-----

Managed Areas

Contained

Management Comments:

Protection Comments:

-----COMMENTS-----

-----DOCUMENTATION-----

Data Sensitivity: (If "Y", be careful in releasing data)

Best Source: Heidorn, Randy

Source Codes: PNDHEI01ILUS

DNDNAI01ILUS

UNDNL01ILUS

Date Printed: MAR 11 1991

ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: PMLIL1Q050*001*IL
NAME: POLYGONATUM PUBESCENS
DOWNY SOLOMON'S-SEAL

-----ELEMENT STATUS-----

Federal Status: State Status: LT
Global Rank: G5 State Rank: S1

-----LOCATORS-----

Site Name: FORT SHERIDAN BLUFF

Survey Site Name:

County: Lake Precision: M

7.5-minute Topographic Map	Quadrangle Code	Margin Number	Ten Ten
HIGHLAND PARK	4208727	23	05,03

Latitude: 421318N South: 0N North: 0N
Longitude: 0874838W East: 00W West: 00W
Township-Range: 043N012E Section: 03 Meridian: 3P

ALSO SEC 10

Directions: Fort Sheridan ravine slopes

Natural Division and Section: 03A Watershed: 04040002
Specific Stream:

-----STATUS-----

Survey Date: Date Last Observed: 1990-06
Year First Observed: Rank or Grade:
Rank Comments:
Data: plant collected(1977)

Contact: ()

-----DESCRIPTION-----

General Description: ravine slopes

Elevation: -1111 Size: 0

-----PROTECTION-----

Managed Areas	Contained

Management Comments:

Protection Comments:

-----COMMENTS-----

-----DOCUMENTATION-----

Data Sensitivity: (If "Y", be careful in releasing data)
Best Source: Heidorn, Randy

Source Codes: PNDHEI01ILUS
UNDNLIO1ILUS

Date Printed: MAR 11 1991

ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: PDBRA0F020*005*IL

NAME: CAKILE EDENTULA

AMERICAN SEA-ROCKET

-----ELEMENT STATUS-----

Federal Status:

State Status: LT

Global Rank: G5

State Rank: S1

-----LOCATORS-----

Site Name:

Survey Site Name:

County: Lake

Cook

Precision: G

Precision:

7.5-minute
Topographic Map

Quadrangle
Code

Margin
Number

Ten
Ten

HIGHLAND PARK

4208727

24

08,06

Latitude: 421113N

South:

North:

Longitude: 0874705W

East:

West:

Township-Range: 043N012E

Section: 24

Meridian: 3P

Directions: Lake Michigan beach from Lake Forest to
Glencoe

Natural Division and Section: 3A

Watershed: 04040002

Specific Stream:

-----STATUS-----

Survey Date:

Date Last Observed: 1990-06-26

Year First Observed: 1990

Rank or Grade:

Rank Comments:

Data: locally abundant in suitable habitat at several locations
along beach

Contact:

()

-----DESCRIPTION-----

General Description: beach

Elevation: Size:

-----PROTECTION-----

Managed Areas

Contained

Management Comments:

Protection Comments:

-----COMMENTS-----

-----DOCUMENTATION-----

Data Sensitivity: (If "Y", be careful in releasing data)

Best Source: Schwegman, John

Source Codes: PNDSCH01ILUS

Date Printed: MAR 11 1991

ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: PMPOA08020*003*IL
NAME: AMMOPHILA BREVILIGULATA
AMERICAN BEACHGRASS

-----ELEMENT STATUS-----

Federal Status: State Status: LE
Global Rank: G5 State Rank: S1

-----LOCATORS-----

Site Name:

Survey Site Name: TOWER ROAD PARK

County: Cook

Precision: S

7.5-minute Topographic Map	Quadrangle Code	Margin Number	Ten Ten
EVANSTON	4208716	1	02,01

Latitude: 420703N South: North:
Longitude: 0874358W East: West:
Township-Range: 042N013E Section: 17 Meridian: 3P

Directions: Beach at Tower Road Park in Winnetka

Natural Division and Section: Watershed: 04040002
Specific Stream:

-----STATUS-----
Survey Date: Date Last Observed: 1990-06-26
Year First Observed: 1990 Rank or Grade:
Rank Comments:
Data:plants found

Contact: ()

-----DESCRIPTION-----
General Description: dune

Elevation: Size:

-----PROTECTION-----
Managed Areas Contained

Management Comments:

Protection Comments:

-----COMMENTS-----

-----DOCUMENTATION-----

Data Sensitivity: (If "Y", be careful in releasing data)
Best Source: Schwegman, John
Source Codes: PNDSCH01ILUS

Date Printed: MAR 11 1991

ILLINOIS NATURAL HERITAGE DATABASE
ELEMENT OCCURRENCE RECORD

-----IDENTIFIERS-----

EOCODE: PDBRA0F020*004*IL

NAME: CAKILE EDENTULA

AMERICAN SEA-ROCKET

-----ELEMENT STATUS-----

Federal Status:

State Status: LT

Global Rank: G5

State Rank: S1

-----LOCATORS-----

Site Name:

Survey Site Name:

County: Cook

Precision: G

7.5-minute
Topographic Map

Quadrangle
Code

Margin
Number

Ten
Ten

EVANSTON

4208716

2

02,01

Latitude: 420712N

South:

North:

Longitude: 0874405W

East:

West:

Township-Range: 042N013E

Section: 08

Meridian: 3P

Directions: Beach at Glencoe and probably S along Lake Michigan

Natural Division and Section: 3C

Watershed: 04040002

Specific Stream:

-----STATUS-----

Survey Date:

Date Last Observed: 1990-06-26

Year First Observed: 1990

Rank or Grade:

Rank Comments:

Data: plants found, probably occurs in suitable habitat all along Lake Michigan

Contact:

()

-----DESCRIPTION-----

General Description: beach

Elevation: Size:

-----PROTECTION-----

Managed Areas

Contained

Management Comments:

Protection Comments:

-----COMMENTS-----

-----DOCUMENTATION-----

Data Sensitivity: (If "Y", be careful in releasing data)

Best Source: Schwegman, John

Source Codes: PNDSCH01ILUS

Date Printed: MAR 11 1991